

**ADVANCE REPORT:**  
**CALIFORNIA VITAL STATISTICS**  
1999

STATE OF CALIFORNIA  
Gray Davis, Governor

HEALTH AND HUMAN SERVICES AGENCY  
Grantland Johnson, Secretary

DEPARTMENT OF HEALTH SERVICES  
Diana M. Bontá, R.N., Dr. P.H., Director



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1999**

Prepared By:

Sandy Ficenec

C. Jane McKendry, Chief  
Vital Statistics Section

Michael Quinn, Chief  
Office of Health Information and Research

Luis Rico, Chief  
Office of Vital Records

Michael L. Rodrian, Chief  
Center for Health Statistics

Department of Health Services  
State of California

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## HIGHLIGHTS

### For the year 1999:

#### California and United States Comparisons

- California's estimated population was 34,036,000, an increase of 1.6 percent (542,000 persons) over the state's 1998 population. California's population comprised 12.5 percent of the United States population, or one of every eight residents.
- California's 518,073 live births represented 13.1 percent of the provisional count of all live births in the U.S., or roughly one of every eight births. California's birth rate (15.2) continued to exceed the provisional U.S. birth rate (14.5).
- California's 227,965 deaths comprised 9.5 percent of the provisional count of all deaths in the U.S., or roughly one of every eleven deaths. California's death rate (6.7) continued to fall below the provisional U.S. death rate (8.8).
- California's infant mortality rate of 5.4 per 1,000 live births was lower than the provisional rate for the United States (7.1).

#### California's Births

- The number of live births to California residents decreased from 521,265 in 1998 to 518,073 in 1999 (-0.6 percent).
- California's birth rate in 1999 was 15.2 births per 1,000 population, a decrease of 2.6 percent from the 1998 birth rate of 15.6.
- California's birth rates decreased in 1999 compared to 1998 for mothers ages 15-24 and increased for mothers ages 25-39 and 45 and over. The birth rate was unchanged for mothers ages under 15 and 40-44.
- Birth rates declined for all race/ethnic groups.
- Hispanics had the largest number (249,253) and percentage (48.1 percent) of births among California's race/ethnic groups.

#### California's Deaths

- The number of deaths to California residents increased 1.1 percent from 225,450 in 1998 to 227,965 in 1999.
- California's 1999 death rate of 6.7 deaths per 1,000 population was unchanged from the 1998 death rate.

- The three most prevalent causes of death were heart disease, malignant neoplasms, and cerebrovascular disease, which together accounted for 61.8 percent of all deaths in California.
- Influenza and pneumonia became the sixth leading cause of death in 1999 with 8,014 deaths. Alzheimer's disease became the eighth leading cause of death in 1999 with 3,934 deaths. These shifts reflect the changes in cause of death coding from the Ninth Revision of the International Classification of Diseases to the Tenth Revision.
- The number of deaths to females (114,341) surpassed the number of deaths to males (113,624).

### **California's Infant Deaths**

- There were 2,787 California infants under the age of one year who died in 1999, a decrease of 207 infant deaths (-6.9 percent) from 1998.
- California's infant mortality rate was the lowest in recorded history, 5.4 infant deaths per 1,000 live births. This was a decrease of 5.3 percent from 1998.

## TABLE OF CONTENTS

HIGHLIGHTS.....	iii-iv
ACKNOWLEDGEMENTS.....	vi
INTRODUCTION.....	vii
<b>SECTION I STATE AND COUNTY VITAL STATISTICS SUMMARY .....</b>	<b>1-3</b>
Table 1 Population, Live Births, Deaths, Fetal Deaths, and Infant Deaths, California, 1980-1999.....	4
Table 2 Population, Live Births, Deaths, Fetal Deaths, and Infant Deaths, California Counties, 1999.....	5
Table 2A Population, Live Births, Deaths, Fetal Deaths, and Infant Deaths, City Health Departments, 1999.....	6
<b>SECTION II LIVE BIRTHS .....</b>	<b>7-9</b>
Table 3 Live Births and Birth Rates by Age of Mother, California, 1995-1999.....	10
Table 4 Live Births by Age of Mother, California Counties and City Health Departments, 1999.....	11
Table 5 Live Births and Birth Rates by Race/Ethnicity of Mother, California, 1995-1999.....	12
Table 6 Live Births by Race/Ethnicity of Mother, California Counties and City Health Departments, 1999.....	13
Table 7 Live Births by Age and Race/Ethnicity of Mother, California, 1999.....	14
Table 8 Number and Percent of Live Births by Birthweight and Race/Ethnicity of Mother, California, 1999.....	15
Table 9 Live Births By Birthweight, California Counties and City Health Departments, 1999 .....	16
Table 10 Number and Percent of Live Births by Trimester Prenatal Care Began and Race/Ethnicity of Mother, California, 1999 .....	17
Table 11 Live Births by Trimester Prenatal Care Began, California Counties and City Health Departments, 1999 .....	18

**SECTION III DEATHS..... 19-20**

Table 12	Ten Leading Causes of Death, California, 1999 .....	21
Table 13	Number and Rate of Deaths by Age and Sex, California, 1998-1999.....	22
Table 14	Deaths by Age, California Counties and City Health Departments, 1999.....	23
Table 15	Deaths and Death Rates by Race/Ethnicity, California, 1995-1999.....	24
Table 16	Deaths by Race/Ethnicity, California Counties and City Health Departments, 1999.....	25
Table 17	Deaths by Sex, Race/Ethnicity and Age, California, 1999 .....	26

**APPENDIX**

A.	POPULATION PROJECTIONS by AGE, RACE/ETHNICITY and SEX, CALIFORNIA, 1999.....	27
B.	TECHNICAL NOTES.....	28-29
C.	DEFINITIONS .....	30
D.	RATES AND RATIO .....	31
E.	REFERENCES .....	32

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## INTRODUCTION

This report is the first of two annual vital statistics reports prepared by the Vital Statistics Section of the Department of Health Services, Center for Health Statistics. This report is an advance report containing final counts of California's 1999 vital events summarized for the State and counties. The purpose of this report is to provide early access to California's summary vital statistics data. Several months following the publication of this advance report, a second, more comprehensive and detailed annual report, Vital Statistics of California 1999, will be published. In addition, tables of 1999 vital statistics data are also available on the Department of Health Services, Center for Health Statistics Home Page ([www.dhs.ca.gov/hisp/chs/chsindex.htm](http://www.dhs.ca.gov/hisp/chs/chsindex.htm)).

Data contained in this report are presented on the number and rate of live births, deaths, fetal deaths and infant deaths for the State, counties and three city health departments. Age, race, and sex-specific data on births and deaths are also presented for the State, counties and three city health departments. Limited trend data are presented for the State and, where appropriate, comparative data for the United States are included.

Population data used in this report were from the following Department of Finance reports: Report 99 E-2, February 2000; Report E-1 City/County Population Estimates with Annual Percent Change, May 2000; Population Estimates by Age, Race/Ethnicity and Sex, May 2000; Population Projections By Age, Race/Ethnicity and Sex, 1970-2040, December 1998. Please refer to each table for the source of population estimates and projections. The population projections are shown on **Appendix Table A**.

The cause of death codes used in this report (**Table 12**) are from the Tenth Revision of the International Classification of Diseases (ICD-10). This is a change from the Ninth Revision ICD Codes, which were used from 1979-1998. The cause of death codes change from a numeric system to an alphanumeric system with an increase in the number of codes. Since this change resulted in some large discontinuity of trends in some leading causes of death, comparisons between 1998 and 1999 cause of death data have not been included in this report.

The sources of the vital statistics data presented in this report are California's birth, death and fetal death certificates registered by the Office of Vital Records. The population data used in preparing this report were obtained from the Demographic Research Unit in the California Department of Finance.

At the end of this report is a discussion of some of the limitations involved in using the data contained in this report, and a set of definitions of key terms. A more complete discussion of these and other important issues concerning the use of California's vital events will be included in Vital Statistics of California 1999.

In addition to this advance report and annual Vital Statistics of California, there are a number of other reports prepared by the Department of Health Services, Center for Health Statistics. These provide more detailed data on particular vital statistics topics, such as trends in cesarean births. Information concerning these reports is available in the Catalog of Publications and Electronic Data Products prepared by the Center. Copies of this catalog can be obtained by calling (916) 445-6355, or by writing to the Department of Health Services, Center for Health Statistics, Office of Health Information and Research, 304 S Street, Third Floor, Sacramento, California, 95814. An internet listing of available reports and on-line versions of many reports and data tables can also be accessed through the Department of Health Services, Center for Health Statistics Home Page website at: [www.dhs.ca.gov/hisp/chs/chsindex.htm](http://www.dhs.ca.gov/hisp/chs/chsindex.htm).

## SECTION I

### STATE AND COUNTY VITAL STATISTICS SUMMARY

Presented in **Table 1** are summary vital statistics data on California's population, live births, deaths, fetal deaths and infant deaths from 1980-1999. Similar data for 1999 are presented for each of California's 58 counties in **Table 2** and for three city health departments in **Table 2A**.

#### Population

The estimated population of California in 1999 was 34,036,000, an increase of 542,000 individuals (1.6 percent) over the state's population in 1998 (**Table 1**).<sup>1</sup> California's population comprised 12.5 percent of the total United States population, or one of every eight U.S. residents.<sup>2</sup>

As shown in **Table 2**, the respective populations of California's counties in 1999 ranged from a high of 9,790,000 in Los Angeles to a low of 1,170 in Alpine. Over one-fourth (28.8 percent) of California's total population resided in Los Angeles County. In addition, the combined populations of counties having a population of over one million (Alameda, Los Angeles, Orange, Riverside, Sacramento, San Bernardino, San Diego and Santa Clara) accounted for over two-thirds (67.7 percent) of the State's population.

#### Live Births

There were 518,073 live births among California residents in 1999, a drop of 3,192 births (-0.6 percent) from 1998. As shown in **Table 1**, this represented a continued decrease in the total number of live births for the State. Prior to 1991, the number of live births in California had increased each year for seventeen straight years dating back to 1974.<sup>3</sup> In 1999, California's live births represented 13.1 percent of all provisional U.S. live births, or approximately one of every eight births.<sup>2</sup>

As shown in **Table 2**, the number of live births in 1999 among the residents of California's 58 counties ranged from a high of 156,153 in Los Angeles to a low of 12 in Alpine and Sierra. Nearly one-third of California's births were to Los Angeles County residents.

#### Birth Rate

California's birth rate has steadily declined since 1990. In 1999, California's birth rate per 1,000 population was 15.2, a drop of 2.6 percent from the rate of 15.6 in 1998 and a drop of 25.5 percent from the 1990 rate of 20.4 (**Table 1 and Figure 1**). California's birth rate in 1999 was higher than the provisional rate for the United States, 15.2 compared to 14.5, continuing a consistent trend extending back many years.<sup>2,4</sup>

Birth rates among California's counties in 1999 ranged from a high of 19.6 in San Benito County to a low of 3.8 in Sierra (**Table 2**).

#### Deaths

There were 227,965 deaths among California residents in 1999, an increase of 2,515 deaths (1.1 percent) from 1998. As shown in **Table 1**, this was the third increase after two consecutive years of decreases in the total number of deaths for the State. In 1999, California's deaths represented 9.5 percent of all provisional U.S. deaths, approximately one of every eleven deaths.

As shown in **Table 2**, the number of deaths in 1999 among the residents of California's counties ranged from a high of 59,614 in Los Angeles to a low of seven in Alpine. Over one-fourth (26.2 percent) of California's deaths were among Los Angeles County residents.

#### Death Rate

California's 1999 death rate of 6.7 per 1,000 population was unchanged from the 1998 rate (**Table 1 and Figure 1**).



California's death rate in 1999 was lower than the provisional death rate for the United States as a whole, 6.7 compared to 8.8, a pattern that has remained unchanged for many years.<sup>4,5</sup>

Among California's counties, the death rate in 1999 ranged from a high of 12.3 in Sierra County to a low of 3.0 in Mono. Many factors affected the variation in county crude death rates shown in **Table 2**, particularly the different age distributions associated with the respective populations of each county. For purposes of comparing death rates among county populations, it is preferable to use age-adjusted death rates rather than crude rates shown in **Table 2**. Other reports prepared by the Department of Health Services contain age-adjusted death rates by county.<sup>5,6</sup>

### Fetal Deaths and Fetal Death Ratio

In 1999, there were 2,927 fetal deaths among California's residents, a decrease of 126 fetal deaths (-4.1 percent) from 1998 (**Table 1**). The 1999 fetal death ratio for California was 5.6 fetal deaths per 1,000 live births.

### Infant Deaths

There were 2,787 infant deaths among California's residents in 1999, a drop of 207 infant deaths (-6.9 percent) from 1998. As shown in **Table 1**, this was the tenth consecutive decrease since the high of 4,853 infant deaths in 1989. In 1999, California's infant deaths represented 9.9 percent of all provisional U.S. deaths, or approximately one of every ten infant deaths.<sup>2</sup>

### Infant Mortality Rate

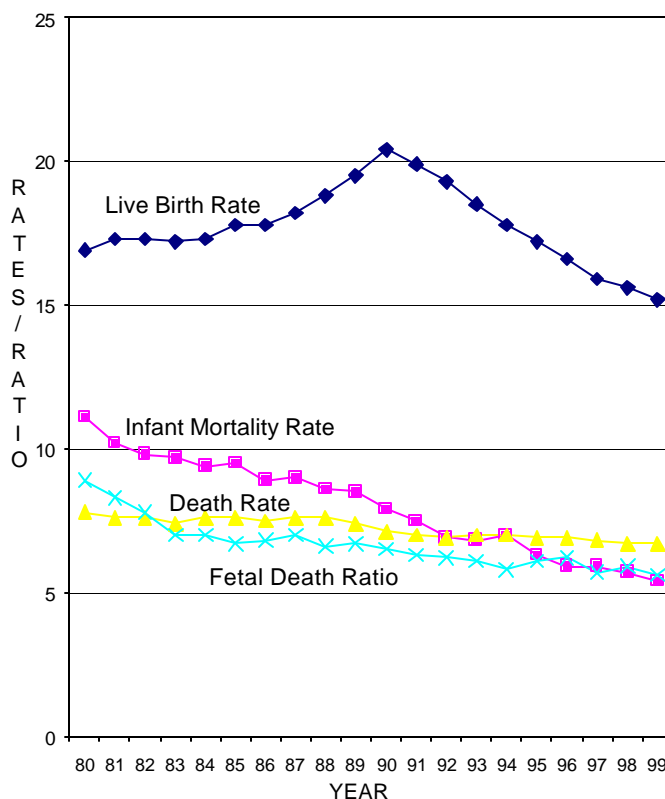
In 1999, California's infant mortality rate per 1,000 live births was 5.4 and was a decrease of 5.3 percent from 1998 (**Table 1 and Figure 1**). This was the lowest infant mortality rate ever recorded for the state.

California's infant mortality rate in 1999 was lower than the provisional infant mortality rate for the United States as a whole, 5.4 compared

to 7.1.<sup>2</sup> California's infant mortality rate has consistently fallen below the U.S. rate.

Infant mortality rates in 1999 for most of California's counties are shown in **Table 2**. The small number in many of the smaller counties prevents the calculation of reliable infant mortality rates. Among those counties with infant mortality rates that have been calculated, the rates varied from a high of 7.6 in San Bernardino to a low of 2.6 in Marin. Even in some of the medium and large counties, the infant mortality rate can vary significantly from year to year. For a more reliable assessment of infant mortality rates by county, infant mortality rates for several years should be examined. Other reports by the Department of Health Services contain trend data relating to county infant death rates.<sup>7</sup>

**FIGURE 1**  
**VITAL STATISTICS RATES/RATIO**  
**CALIFORNIA, 1980-1999**



Live birth and death rates are per 1,000 population.  
Infant death rates and fetal death ratios are per 1,000 live births.  
Source: Table 1.

## **Births, Deaths, Fetal Deaths and Infant Deaths by City Health Department**

Table 2A shows the numbers and rates for three city health departments within their respective counties. Berkeley residents had 4.6 percent (944 births) of the 20,547 live births in Alameda County, and showed a birth rate of 8.6. Of the 156,153 births in Los Angeles County, Long Beach had 8,492 births (5.4 percent) with a birth rate of 18.8 and Pasadena had 2,384 births (1.5 percent) with a birth rate of 16.8.

Berkeley residents accounted for 645 of the 9,863 total deaths in Alameda County (6.5 percent) with a death rate of 5.9. Long Beach accounted for 5.5 percent (3,276 deaths) of the total deaths in Los Angeles County, while Pasadena accounted for 2.0 percent (1,164 deaths). The death rates for Long Beach and Pasadena were 7.3 and 8.2, respectively.

Berkeley had 3 fetal deaths in 1999, 2.2 percent of the 139 fetal deaths in Alameda County. Of the 904 fetal deaths in Los Angeles County, Long Beach had 56 (6.2 percent) and Pasadena had 12 (1.3 percent) with fetal death ratios of 6.6 and 5.0, respectively.

There were three infant deaths in Berkeley in 1999, 2.8 percent of the 109 infant deaths in Alameda County. Los Angeles County had 841 infant deaths in 1999 and of those 52 (6.2 percent) were in Long Beach and 17 (2.0 percent) were in Pasadena. The infant mortality rates for Long Beach and Pasadena were 6.1 and 7.1 respectively.

**TABLE 1**  
**POPULATION, LIVE BIRTHS, DEATHS,**  
**FETAL DEATHS, AND INFANT DEATHS**  
**CALIFORNIA, 1980 - 1999**  
**(By Place of Residence)**

YEAR	POPULATION	LIVE BIRTHS		DEATHS		FETAL DEATHS		INFANT DEATHS	
		Number	Rate <sup>1</sup>	Number	Rate <sup>1</sup>	Number	Ratio <sup>2</sup>	Number	Rate <sup>2</sup>
1999	34,036,000	518,073	15.2	227,965	6.7	2,927	5.6	2,787	5.4
1998	33,494,000	521,265	15.6	225,450	6.7	3,053	5.9	2,994	5.7
1997	32,957,000	524,174	15.9	223,438	6.8	2,996	5.7	3,091	5.9
1996	32,383,000	538,628	16.6	222,308	6.9	3,330	6.2	3,186	5.9
1995	32,063,000	551,226	17.2	222,626	6.9	3,355	6.1	3,478	6.3
1994	31,790,000	567,034	17.8	222,854	7.0	3,299	5.8	3,948	7.0
1993	31,517,000	584,483	18.5	220,271	7.0	3,574	6.1	3,970	6.8
1992	31,188,000	600,838	19.3	214,586	6.9	3,704	6.2	4,174	6.9
1991	30,565,000	609,228	19.9	214,220	7.0	3,834	6.3	4,596	7.5
1990	29,944,000	611,666	20.4	213,766	7.1	3,989	6.5	4,828	7.9
1989	29,142,100	569,308	19.5	215,930	7.4	3,824	6.7	4,853	8.5
1988	28,393,100	532,708	18.8	215,185	7.6	3,527	6.6	4,559	8.6
1987	27,716,900	503,376	18.2	209,395	7.6	3,504	7.0	4,530	9.0
1986	27,052,300	481,905	17.8	202,826	7.5	3,259	6.8	4,298	8.9
1985	26,402,600	470,816	17.8	201,815	7.6	3,171	6.7	4,475	9.5
1984	25,816,300	447,394	17.3	195,470	7.6	3,110	7.0	4,212	9.4
1983	25,336,300	435,722	17.2	188,018	7.4	3,049	7.0	4,226	9.7
1982	24,805,000	429,631	17.3	188,255	7.6	3,333	7.8	4,218	9.8
1981	24,277,700	420,418	17.3	184,732	7.6	3,481	8.3	4,276	10.2
1980	23,780,100	402,720	16.9	186,428	7.8	3,594	8.9	4,451	11.1

<sup>1</sup> Per 1,000 population.

<sup>2</sup> Per 1,000 live births.

Note: Fetal deaths include only those with a stated or presumed period of gestation of 20 weeks or more. Infant deaths are those under one year of age.

Source: State of California, Department of Finance, Demographic Research Unit; 1980-1996 Population: 1970-1996 Population Estimates with Age, Sex and Race/Ethnic Detail, January 1998. 1997 - 1999 Population: Population Estimates for California Counties, Report E-2, July 1 1990 through July 1, 1999, February 2000. Population data for 1999 are provisional.  
State of California, Department of Health Services, Birth, Death, and Fetal Death Records.

**TABLE 2**  
**POPULATION, LIVE BIRTHS, DEATHS, FETAL DEATHS, AND INFANT DEATHS**  
**CALIFORNIA COUNTIES, 1999**  
**(BY PLACE OF RESIDENCE AND BY PLACE OF OCCURRENCE)**

COUNTY	POPULATION	LIVE BIRTHS			DEATHS			FETAL DEATHS		INFANT DEATHS	
		Residence		Occurrence	Residence		Occurrence	Residence		Residence	
		Number	Rate		Number	Rate		Number	Ratio	Number	Rate
CALIFORNIA	34,036,000	518,073	15.2	519,248	227,965	6.7	230,054	2,927	5.6	2,787	5.4
ALAMEDA	1,448,700	20,547	14.2	21,490	9,863	6.8	9,738	139	6.8	109	5.3
ALPINE	1,170	12	10.3	1	7	6.0	11	-	-	-	-
AMADOR	33,650	264	7.8	226	359	10.7	332	2	a,b	-	-
BUTTE	200,600	2,256	11.2	2,670	2,124	10.6	2,244	17	7.5	7	3.1
CALAVERAS	38,350	325	8.5	8	418	10.9	333	2	a,b	1	a,b
COLUSA	18,750	335	17.9	177	148	7.9	111	-	-	2	a,b
CONTRA COSTA	932,000	12,586	13.5	10,620	6,569	7.0	6,493	76	6.0	66	5.2
DEL NORTE	27,450	298	10.9	298	224	8.2	259	1	a,b	1	a,b
EL DORADO	152,400	1,637	10.7	1,229	1,149	7.5	960	8	4.9	8	4.9
FRESNO	794,200	14,019	17.7	14,635	5,460	6.9	5,750	94	6.7	85	6.1
GLENN	26,900	386	14.3	2	241	9.0	146	1	a,b	1	a,b
HUMBOLDT	126,100	1,452	11.5	1,474	1,159	9.2	1,160	8	5.5	6	4.1
IMPERIAL	145,600	2,464	16.9	2,369	856	5.9	782	16	6.5	12	4.9
INYO	18,050	190	10.5	278	198	11.0	182	-	-	-	-
KERN	651,700	11,377	17.5	10,920	4,656	7.1	4,469	76	6.7	78	6.9
KINGS	127,300	2,149	16.9	2,549	700	5.5	646	13	6.0	16	7.4
LAKE	55,400	579	10.5	411	611	11.0	430 <sup>c</sup>	4	a,b	2	a,b
LASSEN	33,350	284	8.5	273	199	6.0	172	1	a,b	1	a,b
LOS ANGELES	9,790,000	156,153	16.0	159,446	59,614	6.1	60,836	904	5.8	841	5.4
MADERA	116,600	1,958	16.8	1,418	868	7.4	779	17	8.7	10	5.1
MARIN	246,700	2,650	10.7	1,816	1,794	7.3	1,835	15	5.7	7	2.6
MARIPOSA	15,900	126	7.9	6	183	11.5	109	-	-	2	a,b
MENDOCINO	86,500	1,012	11.7	968	769	8.9	728	5	4.9	4	a
MERCED	207,000	3,658	17.7	2,999	1,383	6.7	1,198	26	7.1	24	6.6
MODOC	9,575	68	7.1	44	101	10.5	69	-	-	1	a,b
MONO	10,800	119	11.0	22	32	3.0	37	-	-	1	a,b
MONTEREY	390,900	6,718	17.2	6,297	2,374	6.1	2,308	42	6.3	32	4.8
NAPA	124,200	1,493	12.0	1,203	1,218	9.8	1,267	11	7.4	2	a
NEVADA	90,500	770	8.5	886	869	9.6	829	4	a,b	3	a,b
ORANGE	2,813,700	46,509	16.5	49,105	16,644	5.9	16,811	246	5.3	204	4.4
PLACER	232,000	2,954	12.7	2,379	1,778	7.7	2,094	7	2.4	18	6.1
PLUMAS	20,200	137	6.8	114	220	10.9	185	1	a,b	-	-
RIVERSIDE	1,504,100	23,536	15.6	21,899	12,019	8.0	11,457	116	4.9	160	6.8
SACRAMENTO	1,202,100	17,737	14.8	19,767	9,004	7.5	9,499	117	6.6	110	6.2
SAN BENITO	49,700	974	19.6	588	269	5.4	212	4	a,b	2	a,b
SAN BERNARDINO	1,674,700	28,397	17.0	25,341	10,909	6.5	11,526	140	4.9	215	7.6
SAN DIEGO	2,883,500	43,261	15.0	44,384	19,168	6.6	19,852	242	5.6	225	5.2
SAN FRANCISCO	797,200	8,119	10.2	11,494	6,645	8.3	6,944	35	4.3	31	3.8
SAN JOAQUIN	562,600	8,853	15.7	8,563	4,348	7.7	4,336	56	6.3	41	4.6
SAN LUIS OBISPO	240,500	2,357	9.8	2,220	2,024	8.4	1,978	10	4.2	7	3.0
SAN MATEO	727,300	10,108	13.9	6,160	4,926	6.8	5,019	41	4.1	36	3.6
SANTA BARBARA	408,600	5,496	13.5	5,672	2,951	7.2	2,974	27	4.9	26	4.7
SANTA CLARA	1,717,600	26,266	15.3	30,616	9,033	5.3	9,678	116	4.4	127	4.8
SANTA CRUZ	253,400	3,446	13.6	3,539	1,632	6.4	1,615	27	7.8	17	4.9
SHASTA	165,000	1,845	11.2	1,865	1,686	10.2	1,829	10	5.4	11	6.0
SIERRA	3,180	12	3.8	1	39	12.3	40	-	-	-	-
SISKIYOU	43,750	462	10.6	340	465	10.6	417	-	-	1	a,b
SOLANO	394,300	5,539	14.0	5,208	2,358	6.0	2,301	26	4.7	31	5.6
SONOMA	447,300	5,420	12.1	5,546	3,735	8.4	3,771	30	5.5	32	5.9
STANISLAUS	439,800	7,115	16.2	7,884	3,354	7.6	3,621	44	6.2	50	7.0
SUTTER	77,700	1,127	14.5	1,946	644	8.3	432	8	7.1	4	a
TEHAMA	55,300	634	11.5	554	618	11.2	460	1	a,b	6	b
TRINITY	13,050	90	6.9	67	137	10.5	85	-	-	3	a,b
TULARE	365,400	6,762	18.5	6,150	2,545	7.0	2,384	56	8.3	34	5.0
TUOLUMNE	52,800	440	8.3	554	528	10.0	443	2	a,b	2	a,b
VENTURA	751,600	11,444	15.2	10,786	4,556	6.1	4,298	65	5.7	57	5.0
YOLO	158,900	2,142	13.5	1,766	1,033	6.5	897	13	6.1	8	3.7
YUBA	60,000	1,006	16.8	5	551	9.2	683	5	5.0	7	7.0

- Represents zero events.

<sup>a</sup> Rates and ratios are not calculated for fewer than five events.

<sup>b</sup> Fetal death ratios and infant mortality rates are not calculated for counties reporting fewer than 1,000 births.

<sup>c</sup> Artificially low number of deaths in Lake County due to late registration.

Note: Fetal death ratios and infant mortality rates are per 1,000 live births. Live birth and death rates are per 1,000 population.

Fetal deaths include only those with a stated or presumed period of gestation of 20 weeks or more. Infant deaths are those under one year of age.

County population will not add to total due to rounding.

Source: State of California, Department of Finance, Demographic Research Unit. 1999 Population: Population Estimates for California Counties, Report E-2, July 1, 1990 through July 1, 1999, February 2000. Population data for 1999 are provisional.

State of California, Department of Health Services, Birth, Death and Fetal Death Records.



**TABLE 2A**  
**POPULATION, LIVE BIRTHS, DEATHS, FETAL DEATHS, AND INFANT DEATHS**  
**CITY HEALTH DEPARTMENTS, 1999**  
**(BY PLACE OF RESIDENCE AND BY PLACE OF OCCURRENCE)**

LOCAL HEALTH JURISDICTION	POPULATION Jan. 1, 1999	LIVE BIRTHS			DEATHS			FETAL DEATHS		INFANT DEATHS	
		Residence		Occurrence	Residence		Occurrence	Residence		Residence	
		Number	Rate		Number	Rate		Number	Ratio	Number	Rate
CALIFORNIA	33,766,000	518,073	15.3	519,248	227,965	6.8	230,054	2,927	5.6	2,787	5.4
ALAMEDA	1,438,500	20,547	14.3	21,490	9,863	6.9	9,738	139	6.8	109	5.3
BERKELEY	109,300	944	8.6	6,980	645	5.9	862	3	a,b	3	a,b
LOS ANGELES	9,714,900	156,153	16.1	159,446	59,614	6.1	60,836	904	5.8	841	5.4
LONG BEACH	450,800	8,492	18.8	9,224	3,276	7.3	3,726	56	6.6	52	6.1
PASADENA	141,900	2,384	16.8	4,720	1,164	8.2	1,383	12	5.0	17	7.1

<sup>a</sup> Rates and ratios are not calculated for fewer than five events.

<sup>b</sup> Fetal death ratios and infant mortality rates are not calculated for counties/cities reporting fewer than 1,000 births.

Note: Fetal death ratios and infant mortality rates are per 1,000 live births. Live birth and death rates are per 1,000 population.

Fetal deaths include only those with a stated or presumed period of gestation of 20 weeks or more. Infant deaths are those under one year of age.

City numbers are included in their respective county totals.

Source: State of California, Department of Finance, Demographic Research Unit. 1999 Population: Report E-1, City/County Population Estimates, Jan 1, 1999 - Jan 1, 2000, May 2000.

State of California, Department of Health Services, Birth, Death and Fetal Death Records.

## SECTION II

### LIVE BIRTHS

Presented in **Table 3** through **Table 11** are 1999 data on live births for California, for each county and three city health departments by mother's age, mother's race/ethnicity, infant's birthweight, and trimester prenatal care began.

#### Live Births by Mother's Age

**Table 3** shows the number of births grouped by mother's age for the years 1995-1999. During this time period, the number of births to mothers in the age groups of under 15 through 30-34 had generally declined, while births to mothers aged 35 and over increased. The largest percentage decrease in the number of live births between 1998 and 1999 was among mothers aged 15-19 (-2.7 percent), while the largest percentage increase was among mothers 45 and over (16.3 percent).

Mothers aged 25-29 continued to have the largest number of births, followed by 30-34 and 20-24 year-old mothers. These three age groups combined accounted for 73.3 percent of all births in 1999. The percentage of teen births (mothers under the age of 20) among all births decreased to 11.1 percent from 11.4 percent in 1998. Women 35 and over accounted for 15.6 percent of all births in 1999, up from 15.2 percent in 1998 and 13.4 percent in 1995.

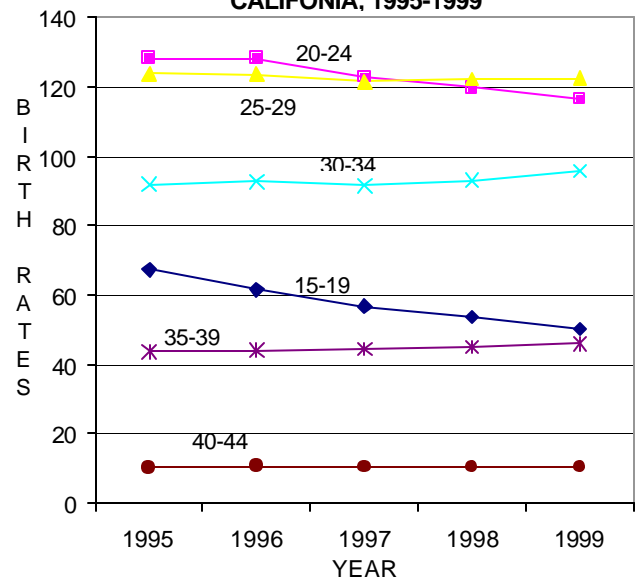
The number of live births in 1999 by mother's age for each county and three city health departments is shown in **Table 4**. Cross-county comparisons of births by mother's age, e.g., percent of teen births, should include more than a single year of data. Other reports from the Department of Health Services provide these types of analyses.<sup>5,6</sup>

#### Birth Rates by Mother's Age

Also shown in **Table 3** are the birth rates by mother's age for the years 1995 through 1999, and the changes in these rates between 1998 and 1999. **Figure 2** shows these rates graphically for the age groups of 15-19 through 40-44.

The number of births per 1,000 women aged 15 through 44 (known as the general fertility rate) decreased from 71.2 in 1998 to 70.5 in 1999, a drop of 1.0 percent, and a decrease of 7.6 percent from the 1995 rate of 76.3. The birth rate went down in 1999 compared to 1998 in the age groups of 15-19 and 20-24. The birth rate increased for mothers aged 25-29 through 35-39 and 45 and over. The rate for mothers aged under 15 and 40-44 was unchanged from 1998. The largest percentage increase in the birth rate was among mothers aged 45 and over (14.3 percent). Mothers aged 15-19 had the largest decrease (-6.3 percent).

**FIGURE 2**  
**BIRTH RATES BY AGE OF MOTHER**  
**CALIFORNIA, 1995-1999**



Rates are per 1,000 females in specified age groups.  
Source: Table 3.

#### Live Births by Mother's Race/Ethnicity

As shown in **Table 5**, Hispanic mothers accounted for the largest number of births for the five year period (1995-1999). Births to

Hispanic mothers accounted for 48.1 percent of all births in 1999.

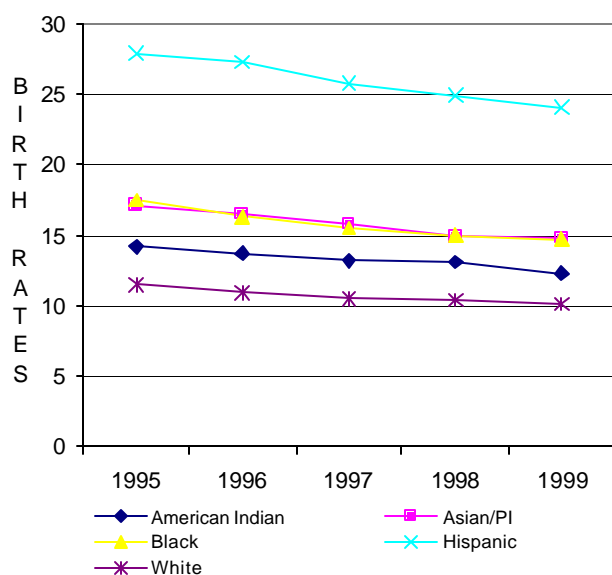
The number and percent changes in live births from 1998 and 1999 by mother's race/ethnicity showed a decrease for the American Indian, Black and White race/ethnic groups while the Asian/Pacific Islander and Hispanic race/ethnic groups showed increases. The largest percentage decrease in the number of live births by mother's race/ethnicity was the decrease in births to American Indian mothers (-3.3 percent).

The number of live births in 1999 by mother's race/ethnicity for each county and three city health departments is shown in **Table 6**.

### Birth Rates by Mother's Race/Ethnicity

Hispanics had the highest birth rate of any race/ethnic group for the five years shown (**Table 5 and Figure 3**). Their 1999 birth rate of 24.1 births per 1,000 population was 63.9 percent higher than among Blacks (14.7) and 62.8 percent higher than among Asian/Pacific Islanders (14.8). The birth rate for Whites was the lowest (10.1) followed by the rate among American Indians (12.3).

**FIGURE 3**  
**BIRTH RATES BY RACE/ETHNICITY OF MOTHER**  
**CALIFORNIA, 1995-1999**



Rates are per 1,000 population.  
Source: Table 5.

The birth rates for all race ethnic groups have decreased each year for the past five years. The largest decrease between 1998 and 1999 was among American Indians dropping from a rate of 13.1 to 12.3 (-6.1 percent), followed by Hispanics (-3.2 percent).

### Live Births by Mother's Age and Race/Ethnicity

The number of live births in 1999 by both mother's age and race/ethnicity are shown in **Table 7**. The highest percentage of births to mothers under 20 was to American Indian and Black mothers with 18.7 and 16.1 percent respectively. Asian mothers had the lowest percentage of births to mothers under age 20 with 4.4 percent. Of the mothers aged 40 and over, mothers of Other race/ethnic groups had the highest percentage of births with 4.5 percent followed by White mothers with 4.2 percent.

### Live Births by Birthweight and Mother's Race/Ethnicity

Shown in **Table 8** are the number and percent of live births in 1999 by birthweight and race/ethnicity of mother. Among all births in 1999, 31,686 (6.1 percent) weighed less than 2500 grams. Black mothers had the highest percentage of low birthweight infants (11.8 percent), and Hispanic mothers had the lowest (5.5 percent).

Numbers of live births in 1999 by birthweight are shown for each county and three city health departments in **Table 9**. Comparisons of low birthweight infants among counties should include more than a single year of data and are contained in other reports from the Department of Health Services.<sup>5,6</sup>

### Live Births by Trimester Prenatal Care Began and Race/Ethnicity of Mother

The number and percent of live births by trimester prenatal care began and race/ethnicity of mother are shown in **Table 10**. In 1999, mother's who received early prenatal care (care beginning in the first trimester) accounted for

426,020 of all births. The percentage of mothers who received early prenatal care ranged from a high of 89.2 percent among White mothers to a low of 68.0 percent among Pacific Islander mothers.

Mothers who received no prenatal care in 1999 (3,361 births) accounted for 0.7 percent of the total births. The percentage of mothers who received no prenatal care ranged from a high of 1.9 percent for Pacific Islander mothers to a low of 0.3 percent among Asian mothers and mothers of Other races.

Numbers of births in 1999, by trimester prenatal care began, are shown for each county and three city health departments in **Table 11**. Comparisons of percentages of mothers who received early or no prenatal care among counties should include more than a single year of data and are included in other reports from the Department of Health Services.<sup>5,6</sup>



**TABLE 3**  
**LIVE BIRTHS AND BIRTH RATES**  
**BY AGE OF MOTHER**  
**CALIFORNIA, 1995 - 1999**  
**(By Place of Residence)**

AGE OF MOTHER (In Years)	NUMBER OF BIRTHS					PERCENT CHANGE 1998 TO 1999
	1995	1996	1997	1998	1999	
TOTAL	551,226	538,628	524,174	521,265	518,073	-0.6
Under 15	1,640	1,485	1,256	1,066	1,038	-2.6
15-19	66,644	63,118	59,851	58,141	56,577	-2.7
20-24	132,607	127,431	122,924	121,317	120,270	-0.9
25-29	148,585	145,795	141,195	140,369	137,637	-1.9
30-34	127,853	125,030	121,938	121,326	121,779	0.4
35-39	60,577	61,836	62,674	64,210	65,532	2.1
40-44	12,573	13,158	13,506	14,010	14,272	1.9
45 and Over	679	685	766	777	904	16.3
Not Stated	68	90	64	49	64	

AGE OF MOTHER (In Years)	BIRTH RATES <sup>1</sup>					PERCENT CHANGE 1998 TO 1999
	1995	1996	1997	1998	1999	
TOTAL	76.3 <sup>a</sup>	74.7 <sup>a</sup>	72.2 <sup>a</sup>	71.2 <sup>a</sup>	70.5 <sup>a</sup>	-1.0
Under 15	1.5	1.3	1.1	0.9	0.9	-
15-19	67.2	61.6	56.7	53.6	50.2	-6.3
20-24	128.2	128.1	122.8	119.8	116.3	-2.9
25-29	123.9	123.6	121.6	122.3	122.5	0.2
30-34	91.9	92.6	91.4	93.1	95.8	2.9
35-39	43.7	44.0	44.4	45.0	46.0	2.2
40-44	10.3	10.5	10.4	10.4	10.4	-
45 and Over	0.7	0.6	0.7	0.7	0.8	14.3
Not Stated	NA	NA	NA	NA	NA	NA

NA Not Applicable.

<sup>1</sup> Age-specific birth rates are per 1,000 females in specified age groups. "Under 15" rates are calculated per 1,000 females aged 10-14 years; "45 and Over" rates are calculated per 1,000 females aged 45-49 years.

<sup>a</sup> Total rates are per 1,000 females 15-44 years of age, technically known as the General Fertility Rate.

- Rates unchanged from prior year.

Note: Rates in this report may differ from rates in previously published Advance Reports since rates were revised to reflect the most current population released by the Department of Finance.

Source: State of California, Department of Finance; 1995-1996 Population: 1970-1996 Population Estimates with Age, Sex and Race/Ethnic Detail, January 1998. 1997 Population: Population Estimates by Age, Sex and Race/Ethnic Detail, June 1999. 1998 Population: Population Estimates by Age, Sex, and Race/Ethnic Detail, May 2000. 1999 Population: 1997-2040 Population Projections with Age, Sex, and Race/Ethnic Detail, December 1998.  
State of California, Department of Health Services, Birth Records.

**TABLE 4**  
**LIVE BIRTHS BY AGE OF MOTHER**  
**CALIFORNIA COUNTIES AND CITY HEALTH DEPARTMENTS, 1999**  
**(By Place of Residence)**

COUNTY	TOTAL	AGE OF MOTHER (In Years)													UNKNOWN
		UNDER 15	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35-39	40-44	45-49	50 AND OVER	
CALIFORNIA	518,073	1,038	2,876	6,671	10,662	15,526	20,842	120,270	137,637	121,779	65,532	14,272	838	66	64
ALAMEDA	20,547	38	87	185	329	423	573	3,831	5,504	5,641	3,236	658	40	2	-
BERKELEY <sup>1</sup>	944	1	3	2	8	11	13	115	194	283	251	61	2	-	-
ALPINE	12	-	-	-	-	-	-	2	2	5	3	-	-	-	-
AMADOR	264	-	1	4	3	6	15	71	61	60	30	13	-	-	-
BUTTE	2,256	6	14	24	56	91	111	609	633	450	216	44	2	-	-
CALAVERAS	325	-	1	5	4	20	18	71	89	65	42	10	-	-	-
COLUSA	335	1	2	10	11	17	16	103	81	61	23	10	-	-	-
CONTRA COSTA	12,586	18	44	104	153	304	373	2,238	3,256	3,516	2,092	452	32	2	2
DEL NORTE	298	-	4	7	8	16	28	91	76	41	19	8	-	-	-
EL DORADO	1,637	2	1	17	31	49	55	325	398	418	269	71	1	-	-
FRESNO	14,019	63	154	325	489	683	758	3,930	3,580	2,507	1,259	254	15	2	-
GLENN	386	3	2	6	14	13	19	112	106	70	36	5	-	-	-
HUMBOLDT	1,452	1	6	22	30	58	63	422	383	279	150	36	2	-	-
IMPERIAL	2,464	10	16	42	75	94	156	699	653	447	230	40	2	-	-
INYO	190	1	-	2	8	10	10	65	41	28	16	9	-	-	-
KERN	11,377	46	118	262	367	513	663	3,411	2,872	1,960	962	191	10	-	2
KINGS	2,149	9	13	44	79	95	148	693	497	357	177	34	3	-	-
LAKE	579	1	1	9	19	25	30	176	152	103	45	16	2	-	-
LASSEN	284	1	1	1	6	12	19	85	91	47	19	1	-	-	1
LOS ANGELES	156,153	323	922	2,069	3,302	4,629	6,221	36,682	41,811	35,822	19,514	4,524	279	17	38
LONG BEACH <sup>1</sup>	8,492	16	40	101	222	307	363	2171	2267	1821	964	201	17	1	1
PASADENA <sup>1</sup>	2,384	5	12	22	31	53	80	425	615	670	378	75	12	6	-
MADERA	1,958	7	25	44	62	94	106	625	496	308	165	24	2	-	-
MARIN	2,650	1	5	8	15	23	40	250	453	907	704	220	21	1	2
MARIPOSA	126	-	1	2	2	6	10	28	34	24	15	4	-	-	-
MENDOCINO	1,012	-	8	15	21	54	49	328	259	163	92	21	2	-	-
MERCED	3,658	13	39	74	131	174	230	1,096	892	680	271	56	2	-	-
MODOC	68	-	1	-	-	1	4	19	18	18	5	2	-	-	-
MONO	119	-	-	2	1	2	1	33	33	30	12	3	2	-	-
MONTEREY	6,718	13	37	121	151	209	340	1,813	1,836	1,406	631	150	11	-	-
NAPA	1,493	1	3	10	26	39	52	343	391	392	188	45	3	-	-
NEVADA	770	-	3	2	13	17	30	165	191	172	136	37	4	-	-
ORANGE	46,509	59	170	432	637	1,040	1,397	9,037	13,002	12,877	6,521	1,260	69	6	2
PLACER	2,954	2	9	17	42	49	79	499	838	880	455	81	3	-	-
PLUMAS	137	1	2	-	1	5	7	42	35	25	16	3	-	-	-
RIVERSIDE	23,536	56	164	345	567	882	1,200	6,306	6,442	4,742	2,327	494	11	-	-
SACRAMENTO	17,737	35	101	221	353	569	760	4,420	4,804	3,919	2,104	410	31	6	4
SAN BENITO	974	2	3	18	14	37	38	202	276	258	104	22	-	-	-
SAN BERNARDINO	28,397	61	192	497	781	1,105	1,543	8,021	7,438	5,517	2,636	565	31	4	6
SAN DIEGO	43,261	66	187	497	777	1,145	1,678	10,096	11,547	10,354	5,622	1,219	59	12	2
SAN FRANCISCO	8,119	11	26	58	87	141	176	1,150	1,861	2,546	1,661	375	26	1	-
SAN JOAQUIN	8,853	31	83	148	265	374	433	2,424	2,412	1,710	776	183	14	-	-
SAN LUIS OBISPO	2,357	3	8	29	41	78	81	558	648	521	317	67	6	-	-
SAN MATEO	10,108	12	28	61	118	179	223	1,549	2,394	3,088	1,968	458	26	3	1
SANTA BARBARA	5,496	6	33	73	113	171	213	1,304	1,448	1,252	702	172	9	-	-
SANTA CLARA	26,266	30	92	212	343	509	715	4,391	6,944	7,777	4,343	863	39	6	2
SANTA CRUZ	3,446	9	18	33	48	76	141	740	841	876	524	128	12	-	-
SHASTA	1,845	6	11	34	50	74	117	572	447	331	172	29	2	-	-
SIERRA	12	-	-	-	-	-	-	1	6	2	3	-	-	-	-
SISKIYOU	462	-	3	10	15	19	27	123	121	83	52	9	-	-	-
SOLANO	5,539	11	23	77	114	162	263	1,372	1,539	1,242	620	112	4	-	-
SONOMA	5,420	11	20	38	114	139	194	1,135	1,477	1,307	792	178	13	2	-
STANISLAUS	7,115	23	47	109	190	253	329	2,068	1,970	1,400	607	109	10	-	-
SUTTER	1,127	1	2	15	20	35	48	312	332	251	94	17	-	-	-
TEHAMA	634	2	6	7	26	23	64	184	159	104	47	10	2	-	-
TRINITY	90	-	1	2	5	4	5	29	20	9	11	4	-	-	-
TULARE	6,762	23	63	149	235	368	408	2,111	1,738	1,051	487	121	8	-	-
TUOLUMNE	440	-	2	3	9	15	25	131	114	78	49	14	-	-	-
VENTURA	11,444	13	54	133	220	291	402	2,364	3,068	2,924	1,596	353	23	1	2
YOLO	2,142	3	11	25	38	51	77	474	586	518	294	61	4	-	-
YUBA	1,006	3	8	12	33	55	61	339	241	160	75	17	1	1	-

- Represents zero events.

<sup>1</sup> Berkeley, Long Beach and Pasadena are city health departments.

Note: City numbers are included in their respective county totals.

Source: State of California, Department of Health Services, Birth Records.

**TABLE 5**  
**LIVE BIRTHS AND BIRTH RATES**  
**BY RACE/ETHNICITY <sup>1</sup> OF MOTHER**  
**CALIFORNIA, 1995-1999**  
**(By Place of Residence)**

RACE/ETHNICITY OF MOTHER	NUMBER OF BIRTHS					PERCENT CHANGE 1998-1999
	1995	1996	1997	1998	1999	
TOTAL	551,226	538,628	524,174	521,265	518,073	-0.6
AMERICAN INDIAN	2,735	2,642	2,582	2,587	2,501	-3.3
ASIAN/PACIFIC ISLANDER	57,238	56,942	56,634	55,536	57,046	2.7
BLACK	39,166	37,029	35,957	35,200	34,136	-3.0
HISPANIC	253,726	254,672	248,795	247,796	249,253	0.6
WHITE <sup>2</sup>	198,361	187,343	180,206	180,146	175,137	-2.8

RACE/ETHNICITY OF MOTHER	BIRTH RATE <sup>3</sup>					PERCENT CHANGE 1998 TO 1999
	1995	1996	1997	1998	1999	
TOTAL	17.2	16.6	15.9	15.6	15.2	-2.6
AMERICAN INDIAN	14.2	13.7	13.2	13.1	12.3	-6.1
ASIAN/PACIFIC ISLANDER	17.1	16.5	15.8	14.9	14.8	-0.7
BLACK	17.4	16.3	15.5	15.0	14.7	-2.0
HISPANIC	27.9	27.3	25.8	24.9	24.1	-3.2
WHITE <sup>2</sup>	11.5	10.9	10.5	10.4	10.1	-2.9

<sup>1</sup> American Indian, Asian/Pacific Islander, Black, and White exclude Hispanic ethnicity. Hispanic includes any race category.

<sup>2</sup> Includes White, Other, and Unknown.

<sup>3</sup> Rates are per 1,000 population.

Note: Population data are available for only these five race/ethnic groups.

Rates in this report may differ from rates in previously published Advance Reports since rates were revised to reflect the most current population released by the Department of Finance.

Source: State of California, Department of Finance; 1995-1996 Population: 1970-1996 Population Estimates with Age, Sex and Race/Ethnic Detail, January 1998. 1997 Population: Population Estimates with Age, Sex and Race/Ethnic Detail, June 1999. 1998 Population: Population Estimates by Age, Sex and Race/Ethnic Detail, May 2000. 1999 Population: 1997-2040 Population Projections with Age, Sex and Race/Ethnic Detail, December 1998.

State of California, Department of Health Services, Birth Records.

**TABLE 6**  
**LIVE BIRTHS BY RACE/ETHNICITY <sup>1</sup> OF MOTHER**  
**CALIFORNIA COUNTIES AND CITY HEALTH DEPARTMENTS, 1999**  
**(By Place of Residence)**

COUNTY	TOTAL	RACE/ETHNICITY OF MOTHER							
		AMERICAN INDIAN	ASIAN	BLACK	HISPANIC	PACIFIC ISLANDER	WHITE	OTHER	UNKNOWN
CALIFORNIA	518,073	2,501	54,206	34,136	249,253	2,840	172,108	334	2,695
ALAMEDA	20,547	88	4,527	3,355	5,754	228	6,423	23	149
BERKELEY <sup>2</sup>	944	6	116	175	148	-	489	2	8
ALPINE	12	5	1	-	1	-	5	-	-
AMADOR	264	7	3	3	35	-	213	1	2
BUTTE	2,256	61	133	48	412	7	1,588	5	2
CALAVERAS	325	6	1	1	37	-	280	-	-
COLUSA	335	6	3	-	216	-	109	1	-
CONTRA COSTA	12,586	39	1,488	1,431	3,317	85	6,139	3	84
DEL NORTE	298	37	11	1	56	1	192	-	-
EL DORADO	1,637	19	55	12	260	7	1,282	1	1
FRESNO	14,019	107	1,196	783	8,072	18	3,816	17	10
GLENN	386	5	14	1	171	-	193	2	-
HUMBOLDT	1,452	134	32	12	154	5	1,069	3	43
IMPERIAL	2,464	3	29	26	1,871	1	531	1	2
INYO	190	25	3	1	59	1	101	-	-
KERN	11,377	75	394	662	5,885	15	4,288	5	53
KINGS	2,149	30	72	111	1,142	5	786	1	2
LAKE	579	29	6	6	125	6	406	-	1
LASSEN	284	18	2	3	31	5	225	-	-
LOS ANGELES	156,153	270	14,397	13,724	97,103	653	29,514	108	384
LONG BEACH <sup>2</sup>	8,492	14	889	1,347	4,372	195	1,661	5	9
PASADENA <sup>2</sup>	2,384	6	245	318	1,079	5	711	2	18
MADERA	1,958	23	29	47	1,307	-	550	-	2
MARIN	2,650	4	185	48	543	7	1,837	3	23
MARIPOSA	126	3	-	1	10	-	111	-	1
MENDOCINO	1,012	81	10	2	319	3	579	-	18
MERCED	3,658	18	280	115	2,174	7	1,058	3	3
MODOC	68	7	2	-	7	-	52	-	-
MONO	119	4	1	-	45	-	69	-	-
MONTEREY	6,718	21	346	138	4,500	40	1,637	1	35
NAPA	1,493	8	53	11	679	4	738	-	-
NEVADA	770	6	8	-	77	2	676	-	1
ORANGE	46,509	76	5,825	627	22,769	231	16,797	12	172
PLACER	2,954	11	139	29	435	5	2,322	1	12
PLUMAS	137	6	1	-	13	1	116	-	-
RIVERSIDE	23,536	138	759	1,424	12,423	85	8,649	18	40
SACRAMENTO	17,737	129	2,373	2,065	3,896	161	9,049	7	57
SAN BENITO	974	3	38	8	606	1	316	-	2
SAN BERNARDINO	28,397	144	1,218	2,691	14,626	131	9,521	20	46
SAN DIEGO	43,261	233	4,019	2,740	18,400	328	17,402	10	129
SAN FRANCISCO	8,119	18	2,594	776	1,825	96	2,700	32	78
SAN JOAQUIN	8,853	58	1,137	671	3,688	37	3,247	2	13
SAN LUIS OBISPO	2,357	19	70	24	656	3	1,581	-	4
SAN MATEO	10,108	19	2,127	288	3,310	278	4,000	11	75
SANTA BARBARA	5,496	22	211	97	3,165	9	1,971	-	21
SANTA CLARA	26,266	71	7,665	615	9,105	143	8,251	13	403
SANTA CRUZ	3,446	10	105	17	1,715	6	1,514	3	76
SHASTA	1,845	81	47	22	185	1	1,500	2	7
SIERRA	12	-	-	-	2	-	10	-	-
SISKIYOU	462	16	10	4	75	2	354	-	1
SOLANO	5,539	34	767	870	1,413	92	2,344	9	10
SONOMA	5,420	47	229	79	1,780	21	3,229	1	34
STANISLAUS	7,115	52	355	188	3,165	32	3,308	2	13
SUTTER	1,127	10	180	22	357	5	552	1	-
TEHAMA	634	21	5	6	179	1	420	2	-
TRINITY	90	8	1	1	7	1	72	-	-
TULARE	6,762	45	192	86	4,497	8	1,923	9	2
TUOLUMNE	440	21	6	-	43	1	369	-	-
VENTURA	11,444	41	581	175	5,508	48	4,414	-	677
YOLO	2,142	22	161	41	845	6	1,059	1	7
YUBA	1,006	7	110	28	203	7	651	-	-

- Represents zero events.

<sup>1</sup> American Indian, Asian, Black, Pacific Islander, White, Other and Unknown races exclude Hispanic ethnicity.  
Hispanic includes any race category.

<sup>2</sup> Berkeley, Long Beach and Pasadena are city health departments.

Note: City numbers are included in their respective county totals.

Source: State of California, Department of Health Services, Birth Records.



**TABLE 7**  
**LIVE BIRTHS BY AGE AND RACE/ETHNICITY <sup>1</sup> OF MOTHER**  
**CALIFORNIA, 1999**  
**(By Place of Residence)**

AGE OF MOTHER (In Years)	TOTAL	RACE/ETHNICITY OF MOTHER							
		AMERICAN INDIAN	ASIAN	BLACK	HISPANIC	PACIFIC ISLANDER	WHITE	OTHER	UNKNOWN
TOTAL	518,073	2,501	54,206	34,136	249,253	2,840	172,108	334	2,695
UNDER 15	1,038	5	40	119	733	3	129	2	7
15	2,876	14	113	282	2,098	4	356	2	7
16	6,671	54	249	615	4,662	22	1,036	6	27
17	10,662	100	456	968	7,282	48	1,761	5	42
18	15,526	128	653	1,483	9,945	79	3,180	7	51
19	20,842	166	895	2,040	12,698	115	4,842	11	75
20-24	120,270	790	6,615	9,902	71,544	756	30,135	84	444
25-29	137,637	602	15,640	8,072	68,067	809	43,771	87	589
30-34	121,779	395	17,684	6,353	46,461	607	49,457	67	755
35-39	65,532	200	9,680	3,506	21,011	302	30,254	48	531
40-44	14,272	42	2,033	759	4,505	95	6,683	15	140
45-49	838	5	138	28	212	-	444	-	11
50 AND OVER	66	-	8	-	3	-	44	-	11
UNKNOWN	64	-	2	9	32	-	16	-	5

- Represents zero events.

<sup>1</sup> American Indian, Asian, Black, Pacific Islander, White, Other and Unknown races exclude Hispanic ethnicity.  
Hispanic includes any race category.

Source: State of California, Department of Health Services, Birth Records.

**TABLE 8**  
**NUMBER AND PERCENT OF LIVE BIRTHS**  
**BY BIRTHWEIGHT AND RACE/ETHNICITY <sup>1</sup> OF MOTHER**  
**CALIFORNIA, 1999**  
**(BY PLACE OF RESIDENCE)**

BIRTHWEIGHT (IN GRAMS)	TOTAL		RACE/ETHNICITY OF MOTHER														
			AMERICAN INDIAN		ASIAN		BLACK		HISPANIC		PACIFIC ISLANDER		WHITE		OTHER		UNKNOWN
	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER
TOTAL	518,073	100.0	2,501	100.0	54,206	100.0	34,136	100.0	249,253	100.0	2,840	100.0	172,108	100.0	334	100.0	2,695
UNDER 1500	5,950	1.1	25	1.0	561	1.0	1,018	3.0	2,569	1.0	38	1.3	1,675	1.0	2	0.6	62
1500-2499	25,736	5.0	125	5.0	3,170	5.8	3,027	8.9	11,236	4.5	137	4.8	7,873	4.6	21	6.3	147
2500-3499	273,366	52.8	1,171	46.8	34,747	64.1	20,116	58.9	132,077	53.0	1,292	45.5	82,416	47.9	192	57.5	1,355
3500-4499	204,237	39.4	1,118	44.7	15,342	28.3	9,622	28.2	99,149	39.8	1,268	44.6	76,544	44.5	112	33.5	1,082
4500 AND OVER	8,778	1.7	62	2.5	386	0.7	353	1.0	4,219	1.7	105	3.7	3,600	2.1	7	2.1	46
UNKNOWN	6 <sup>a</sup>	-	-	-	-	-	-	-	3 <sup>a</sup>	-	-	-	-	-	-	-	3

- Represents zero events.

<sup>1</sup> American Indian, Asian, Black, Pacific Islander, White, Other and Unknown races exclude Hispanic ethnicity.  
Hispanic includes any race category.

<sup>a</sup> Unknown birthweight is subtracted from total births before percentages are calculated.

Note: Percents are rounded independently and may not add to totals.

Source: State of California, Department of Health Services, Birth Records.

**TABLE 9**  
**LIVE BIRTHS BY BIRTHWEIGHT**  
**CALIFORNIA COUNTIES AND CITY HEALTH DEPARTMENTS, 1999**  
**(By Place of Residence)**

COUNTY	TOTAL	BIRTHWEIGHT					UNKNOWN
		UNDER 1500 GRAMS	1500 - 2499 GRAMS	2500 - 3499 GRAMS	3500 - 4499 GRAMS	4500 GRAMS AND OVER	
CALIFORNIA	518,073	5,950	25,736	273,366	204,237	8,778	6
ALAMEDA	20,547	270	1,072	10,990	7,821	394	-
BERKELEY <sup>1</sup>	944	16	47	457	411	13	-
ALPINE	12	-	-	6	6	-	-
AMADOR	264	1	13	125	122	3	-
BUTTE	2,256	12	111	1,039	1,041	53	-
CALAVERAS	325	1	18	175	128	3	-
COLUSA	335	6	16	146	158	9	-
CONTRA COSTA	12,586	123	677	6,211	5,305	270	-
DEL NORTE	298	4	8	136	144	6	-
EL DORADO	1,637	12	69	891	631	34	-
FRESNO	14,019	169	734	7,688	5,210	218	-
GLENN	386	7	11	169	189	10	-
HUMBOLDT	1,452	9	47	651	703	42	-
IMPERIAL	2,464	22	99	1,360	947	36	-
INYO	190	-	8	110	70	2	-
KERN	11,377	130	559	5,989	4,471	228	-
KINGS	2,149	31	108	1,080	882	48	-
LAKE	579	6	24	282	256	11	-
LASSEN	284	-	9	167	101	7	-
LOS ANGELES	156,153	1,993	8,239	84,641	58,894	2,385	1
LONG BEACH <sup>1</sup>	8,492	129	497	4,491	3,224	151	-
PASADENA <sup>1</sup>	2,384	38	154	1,373	792	27	-
MADERA	1,958	16	83	1,099	721	39	-
MARIN	2,650	22	112	1,283	1,163	70	-
MARIPOSA	126	2	3	64	57	-	-
MENDOCINO	1,012	6	28	467	480	31	-
MERCED	3,658	32	190	1,945	1,444	47	-
MODOC	68	1	3	31	31	2	-
MONO	119	1	7	80	28	3	-
MONTEREY	6,718	69	328	3,238	2,929	154	-
NAPA	1,493	15	62	709	676	31	-
NEVADA	770	3	40	410	302	15	-
ORANGE	46,509	453	2,125	24,507	18,699	725	-
PLACER	2,954	24	107	1,413	1,357	53	-
PLUMAS	137	-	3	88	45	1	-
RIVERSIDE	23,536	251	1,104	12,799	9,023	359	-
SACRAMENTO	17,737	235	930	8,971	7,251	350	-
SAN BENITO	974	8	39	502	407	18	-
SAN BERNARDINO	28,397	391	1,397	15,411	10,781	417	-
SAN DIEGO	43,261	481	2,082	21,900	18,003	795	-
SAN FRANCISCO	8,119	80	471	4,406	3,056	106	-
SAN JOAQUIN	8,853	99	393	4,760	3,426	175	-
SAN LUIS OBISPO	2,357	25	91	1,171	1,034	36	-
SAN MATEO	10,108	94	492	5,198	4,143	176	5
SANTA BARBARA	5,496	51	251	2,851	2,251	92	-
SANTA CLARA	26,266	277	1,343	14,307	9,927	412	-
SANTA CRUZ	3,446	36	146	1,661	1,537	66	-
SHASTA	1,845	21	74	835	871	44	-
SIERRA	12	-	1	5	6	-	-
SISKIYOU	462	3	22	247	186	4	-
SOLANO	5,539	79	305	2,789	2,254	112	-
SONOMA	5,420	51	260	2,639	2,349	121	-
STANISLAUS	7,115	96	321	3,765	2,837	96	-
SUTTER	1,127	6	62	535	501	23	-
TEHAMA	634	8	22	315	277	12	-
TRINITY	90	1	3	50	32	4	-
TULARE	6,762	71	306	3,502	2,749	134	-
TUOLUMNE	440	6	20	216	192	6	-
VENTURA	11,444	104	549	5,850	4,723	218	-
YOLO	2,142	19	82	996	992	53	-
YUBA	1,006	17	57	495	418	19	-

- Represents zero events.

<sup>1</sup> Berkeley, Long Beach and Pasadena are city health departments.

Note: City numbers are included in their respective county totals.

Source: State of California, Department of Health Services, Birth Records.

**TABLE 10**  
**NUMBER AND PERCENT OF LIVE BIRTHS**  
**BY TRIMESTER PRENATAL CARE BEGAN AND RACE/ETHNICITY <sup>1</sup> OF MOTHER**  
**CALIFORNIA, 1999**  
**(By Place of Residence)**

RACE/ETHNICITY OF MOTHER	TOTAL		TRIMESTER PRENATAL CARE BEGAN						NO PRENATAL CARE		UNKNOWN <sup>2</sup>
			FIRST TRIMESTER		SECOND TRIMESTER		THIRD TRIMESTER				
	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER
TOTAL	518,073	100.0	426,020	83.6	67,253	13.2	12,958	2.5	3,361	0.7	8,481
AMERICAN INDIAN	2,501	100.0	1,782	72.5	507	20.6	124	5.0	45	1.8	43
ASIAN	54,206	100.0	46,296	86.6	5,943	11.1	1,026	1.9	187	0.3	754
BLACK	34,136	100.0	27,030	81.1	5,013	15.0	881	2.6	420	1.2	792
HISPANIC	249,253	100.0	195,020	79.7	39,850	16.3	8,120	3.3	1,781	0.7	4,482
PACIFIC ISLANDER	2,840	100.0	1,893	68.0	639	23.0	196	7.0	54	1.9	58
WHITE	172,108	100.0	151,573	89.2	15,017	8.8	2,574	1.5	839	0.5	2,105
OTHER	334	100.0	262	79.4	56	17.0	11	3.3	1	0.3	4
UNKNOWN	2,695	a	2,164	a	228	a	26	a	34	a	243

<sup>1</sup> American Indian, Asian, Black, Pacific Islander, White, Other and Unknown races exclude Hispanic ethnicity.  
Hispanic includes any race category.

<sup>2</sup> Unknown trimester is subtracted from total births before percentages are calculated.

<sup>a</sup> Percentage distribution is not calculated for unknown race/ethnicity of mother.

Note: Percents are rounded independently and may not add to totals.

Source: State of California, Department of Health Services, Birth Records.

**TABLE 11**  
**LIVE BIRTHS BY TRIMESTER PRENATAL CARE BEGAN**  
**CALIFORNIA COUNTIES AND CITY HEALTH DEPARTMENTS, 1999**  
**(By Place of Residence)**

COUNTY	TOTAL	TRIMESTER PRENATAL CARE BEGAN			NO PRENATAL CARE	UNKNOWN
		FIRST TRIMESTER	SECOND TRIMESTER	THIRD TRIMESTER		
CALIFORNIA	518,073	426,020	67,253	12,958	3,361	8,481
ALAMEDA	20,547	17,978	1,849	322	100	298
BERKELEY <sup>1</sup>	944	876	47	10	6	5
ALPINE	12	6	5	1	-	-
AMADOR	264	223	35	4	-	2
BUTTE	2,256	1,640	514	75	21	6
CALAVERAS	325	272	43	6	3	1
COLUSA	335	204	104	26	1	-
CONTRA COSTA	12,586	11,085	1,075	226	75	125
DEL NORTE	298	239	48	10	1	-
EL DORADO	1,637	1,363	204	46	7	17
FRESNO	14,019	11,688	1,817	311	115	88
GLENN	386	267	97	20	1	1
HUMBOLDT	1,452	1,172	207	34	7	32
IMPERIAL	2,464	1,854	403	112	38	57
INYO	190	133	45	9	2	1
KERN	11,377	8,702	1,469	221	32	953
KINGS	2,149	1,763	302	65	11	8
LAKE	579	408	119	38	5	9
LASSEN	284	234	40	8	1	1
LOS ANGELES	156,153	132,670	17,482	3,004	851	2,146
LONG BEACH <sup>1</sup>	8,492	6,874	1,113	230	65	210
PASADENA <sup>1</sup>	2,384	1,939	268	48	12	117
MADERA	1,958	1,575	290	59	27	7
MARIN	2,650	2,305	282	35	4	24
MARIPOSA	126	80	37	6	-	3
MENDOCINO	1,012	565	339	93	10	5
MERCED	3,658	2,264	1,013	291	34	56
MODOC	68	52	13	2	1	-
MONO	119	86	27	5	1	-
MONTEREY	6,718	5,185	1,179	280	31	43
NAPA	1,493	1,023	281	55	9	125
NEVADA	770	624	124	13	4	5
ORANGE	46,509	40,248	4,920	960	169	212
PLACER	2,954	2,538	326	46	13	31
PLUMAS	137	116	17	2	1	1
RIVERSIDE	23,536	18,547	3,740	817	185	247
SACRAMENTO	17,737	14,003	2,740	552	161	281
SAN BENITO	974	835	120	8	3	8
SAN BERNARDINO	28,397	21,704	4,901	944	309	539
SAN DIEGO	43,261	34,730	5,726	1,388	517	900
SAN FRANCISCO	8,119	6,788	1,034	169	77	51
SAN JOAQUIN	8,853	6,240	1,900	450	90	173
SAN LUIS OBISPO	2,357	1,957	316	45	10	29
SAN MATEO	10,108	8,546	1,286	210	54	12
SANTA BARBARA	5,496	4,299	944	195	20	38
SANTA CLARA	26,266	22,365	2,934	589	73	305
SANTA CRUZ	3,446	2,918	412	66	16	34
SHASTA	1,845	1,574	217	38	13	3
SIERRA	12	9	3	-	-	-
SISKIYOU	462	393	56	7	2	4
SOLANO	5,539	3,570	949	224	54	742
SONOMA	5,420	4,498	543	84	28	267
STANISLAUS	7,115	5,739	1,112	168	56	40
SUTTER	1,127	750	305	63	7	2
TEHAMA	634	509	100	22	-	3
TRINITY	90	72	14	3	1	-
TULARE	6,762	4,843	1,347	207	38	327
TUOLUMNE	440	388	43	7	2	-
VENTURA	11,444	10,010	1,072	149	30	183
YOLO	2,142	1,560	420	109	18	35
YUBA	1,006	611	313	59	22	1

- Represents zero events.

<sup>1</sup> Berkeley, Long Beach, and Pasadena are city health departments.

Note: City numbers are included in their respective county totals.

Source: State of California, Department of Health Services, Birth Records.

## SECTION III

### DEATHS

Presented in **Table 12** through **Table 17** are data on deaths in 1999 for California and for each of the 58 counties and three city health departments detailed by the ten leading causes of death, age, sex, and race/ethnicity.

#### Ten Leading Causes of Death

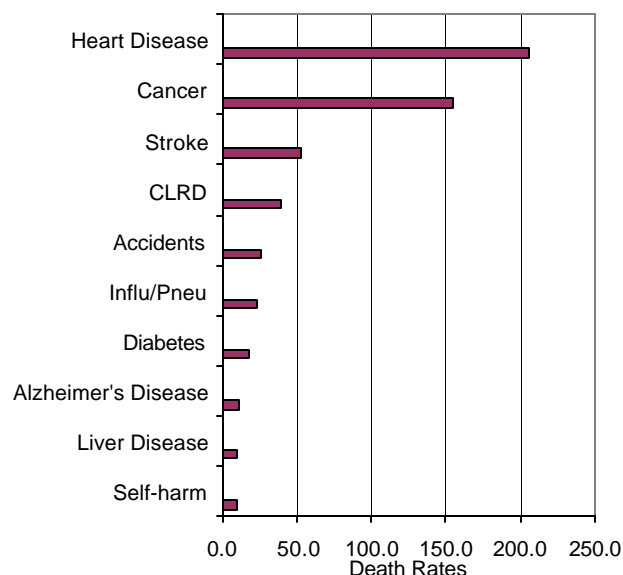
In 1999, the codes used to classify cause of death changed from the Ninth Revision of the International Classification of Diseases (ICD) to the Tenth Revision. While heart disease, malignant neoplasms, and cerebrovascular disease remained the first, second, and third leading causes of death, other changes occurred within the rank ordering of the ten leading causes (**Table 12**). Chronic lower respiratory diseases (CLRD) and accidents became fourth and fifth leading causes. Influenza and pneumonia and diabetes were the sixth and seventh leading causes respectively. In 1999, Alzheimer's disease became the eighth leading cause followed by chronic liver disease and cirrhosis and intentional self-harm (suicide) which ranked ninth and tenth respectively.

Death data by cause for the United States were not available at the time of publication so comparisons could not be made.

**Table 12 and Figure 4** also show death rates for each of the ten leading causes of death in 1999. U.S. death rates by cause were not available at time of publication so comparisons could not be made.

Cause-specific death rates for California's counties are not included in this report since they should be calculated using more than a single year of data. Three-year average, cause-specific death rates are available in other Department of Health Services reports.<sup>5, 6</sup>

**FIGURE 4**  
**DEATH RATES FOR TEN LEADING CAUSES**  
**CALIFORNIA, 1999**

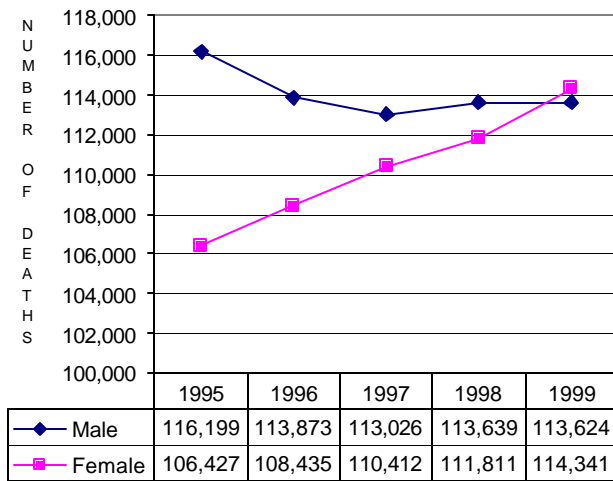


Rates are per 100,000 population.  
Source: Table 12.

#### Deaths by Age and Sex

For the first time the total number of deaths to females surpassed the total number of deaths to males (114,341 and 113,624 respectively). This was the ninth consecutive increase in female deaths.<sup>3</sup> **Figure 5** shows the number of deaths by sex for the years 1995-1999. Within this time period, the number of female deaths increased 7.4 percent (7,914 deaths), while the number of male deaths decreased 2.2 percent (2,575 deaths). Between 1998 and 1999 the total number of deaths decreased slightly for males (less than -0.05 percent) and increased for females (2.3 percent), although the percent changes varied by age group.

**FIGURE 5**  
**NUMBER OF DEATHS BY SEX**  
**CALIFORNIA, 1995-1999**



Source: State of California, Department of Health Services, Death Record

**Table 13** shows that for males between 1998 and 1999, there were decreases in the number of deaths in the age groups under 1, 5-44 and 55-74. The largest percentage decrease was in the age group of 5-14, down 9.6 percent. The number of deaths increased for males in the age groups of 1-4, 45-54 and 75 and over. For females, the largest percentage decrease between 1998 and 1999 was in the age group under 1 (-8.0 percent). The largest increase for females was in the age group 45-54 (6.0 percent).

**Table 13** also shows the age and sex-specific death rates among Californians between 1998 and 1999. While the overall death rate for females (673.7) was higher than the death rate for males (664.5), death rates were lower for females compared to males in each age group. Death rates for females decreased between 1998 and 1999 in nine of the eleven age groups. The largest decrease in the death rate among females was in the age group under 1 (-13.1 percent). Death rates increased among females in the age group of 45-54 (2.3 percent) and increased slightly for females 85 and Over (less than -0.05 percent). For males, death rates decreased in all age groups with the exception of the age group 1-4 which increased 3.8 percent. The largest decrease in the death

rates for males was in the age group 5-14 (-12.4 percent).

United States death data by age and gender were not available at time of publication so comparisons could not be made.

Shown in **Table 14** are the number of deaths in 1999 by age group for each California county and three city health departments. Age-specific rates by county should be calculated by using more than a single year of data and are available in other Department of Health Services reports.<sup>6</sup>

### Deaths by Race/Ethnicity

The numbers and rates of death by race/ethnicity for Californians from 1995 through 1999 are shown in **Table 15**. Whites accounted for the largest percentage of deaths in each of the five years shown (74.5 percent in 1995 down to 73.3 percent in 1999). The number of deaths increased between 1998 and 1999 for each race/ethnic group with the exception of American Indians which decreased by 3.3 percent.

Whites also had the highest death rates among the race/ethnic groups over the five year period. American Indians experienced a decrease in their death rates between 1998 and 1999, while the death rate for the Asian/Pacific Islanders and Blacks increased. The rates for Hispanics and Whites were unchanged between 1998 and 1999. The relatively low death rates among California's American Indian, Asian/Pacific Islander and Hispanic race/ethnic groups is partly due to the manner in which race/ethnicity is reported among these groups.<sup>8, 9, 10</sup>

**Table 16** shows the number of deaths in 1999 by race/ethnicity for each California county and three city health departments.

### Deaths by Race/Ethnicity, Age and Sex

Numbers of deaths by race/ethnicity, age and sex for California in 1999 are shown in **Table 17**.



**TABLE 12**  
**TEN LEADING CAUSES OF DEATH**  
**CALIFORNIA, 1999**  
**(By Place of Residence)**

CAUSE OF DEATH	TENTH REVISION ICD CODE	NUMBER	RANK	PERCENT OF DEATHS	DEATH RATE
ALL CAUSES	A00-Y899	227,965		100.0	669.8
DISEASES OF THE HEART	I00-I09,I11,I13,I20-I51	69,900	1	30.7	205.4
MALIGNANT NEOPLASMS	C00-C97	52,880	2	23.2	155.4
CEREBROVASCULAR DISEASE	I60-I69	18,079	3	7.9	53.1
CHRONIC LOWER RESPIRATORY DISEASES	J40-J47	13,187	4	5.8	38.7
ACCIDENTS	V01-X59,Y85-Y86	8,940	5	3.9	26.3
INFLUENZA AND PNEUMONIA	J10-J18	8,014	6	3.5	23.5
DIABETES	E10-E14	6,004	7	2.6	17.6
ALZHEIMER'S DISEASE	G30	3,934	8	1.7	11.6
CHRONIC LIVER DISEASE AND CIRRHOSIS	K70,K73-K74	3,546	9	1.6	10.4
INTENTIONAL SELF-HARM (SUICIDE)	X60-X84,Y87.0	3,047	10	1.3	9.0
ALL OTHER CAUSES	Residual	40,434		17.7	

Note: Rates are per 100,000 population.  
Percents are rounded independently and may not add to totals.

Source: State of California, Department of Finance, Demographic Research Unit; 1999 Population: Population  
Estimates for California State and Counties, Report 99 E-2, July 1, 1990 through July 1, 1999, February 2000.  
Population data for 1999 are provisional.

State of California, Department of Health Services, Death Records.

**TABLE 13**  
**NUMBER AND RATE OF DEATHS**  
**BY AGE AND SEX**  
**CALIFORNIA, 1998 - 1999**  
**(By Place of Residence)**

AGE (In Years)	NUMBER						PERCENT CHANGE 1998 TO 1999		
	1998			1999					
	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE
TOTAL <sup>1</sup>	225,450	113,639	111,811	227,965	113,624	114,341	1.1	b	2.3
UNDER 1	2,994	1,627	1,367	2,787	1,530	1,257	-6.9	-6.0	-8.0
1-4	581	323	258	595	337	258	2.4	4.3	-
5-14	842	500	342	793	452	341	-5.8	-9.6	-0.3
15-24	3,182	2,413	769	3,018	2,268	750	-5.2	-6.0	-2.5
25-34	4,623	3,315	1,308	4,296	3,054	1,242	-7.1	-7.9	-5.0
35-44	9,453	6,187	3,266	9,109	5,941	3,168	-3.6	-4.0	-3.0
45-54	15,349	9,705	5,644	15,907	9,922	5,985	3.6	2.2	6.0
55-64	22,304	13,290	9,014	22,454	13,171	9,283	0.7	-0.9	3.0
65-74	42,621	23,620	19,001	41,620	22,980	18,640	-2.3	-2.7	-1.9
75-84	65,285	32,472	32,813	66,388	32,887	33,501	1.7	1.3	2.1
85 AND OVER	58,118	20,102	38,016	60,926	21,019	39,907	4.8	4.6	5.0

AGE (In Years)	RATE						PERCENT CHANGE 1998 TO 1999		
	1998			1999					
	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE
TOTAL <sup>1</sup>	673.1	676.6	669.6	669.1	664.5	673.7	-0.6	-1.8	0.6
UNDER 1 <sup>a</sup>	573.5	610.7	534.7	503.5	540.6	464.8	-12.2	-11.5	-13.1
1-4	26.3	28.6	23.9	26.8	29.7	23.8	1.9	3.8	-0.4
5-14	15.9	18.5	13.3	14.6	16.2	12.9	-8.2	-12.4	-3.0
15-24	73.0	106.8	36.7	67.2	97.3	34.7	-7.9	-8.9	-5.4
25-34	88.7	120.2	53.4	84.4	113.4	51.9	-4.8	-5.7	-2.8
35-44	167.5	215.1	118.0	159.7	204.0	113.5	-4.7	-5.2	-3.8
45-54	371.5	473.2	271.2	371.3	466.4	277.5	-0.1	-1.4	2.3
55-64	877.4	1,074.7	690.5	848.0	1,021.6	683.3	-3.4	-4.9	-1.0
65-74	2,187.0	2,668.1	1,786.5	2,139.1	2,582.5	1,765.4	-2.2	-3.2	-1.2
75-84	5,279.7	6,474.8	4,464.3	5,217.0	6,330.2	4,449.0	-1.2	-2.2	-0.3
85 AND OVER	14,296.5	16,008.6	13,531.2	14,201.3	15,660.2	13,537.1	-0.7	-2.2	b

<sup>1</sup> Includes unknown age.

<sup>a</sup> Death rates for "Under 1" are calculated using population data and differ from the infant death rates shown in Tables 1 & 2 which are calculated using the number of live births.

<sup>b</sup> Less than 0.05 percent.

<sup>-</sup> Number unchanged from prior year.

Note: Rates are per 100,000 population.

Rates in this report may differ from rates in previously published Advance Reports since rates were revised to reflect the most current population released by the Department of Finance.

Source: State of California, Department of Finance; 1998 Population: Population Estimates with Age, Sex and Race/Ethnic Detail, May 2000. 1999 Population: 1997-2040 Population Projections with Age, Sex and Race/Ethnic Detail, December, 1998.

State of California, Department of Health Services, Death Records.

**TABLE 14**  
**DEATHS BY AGE**  
**CALIFORNIA COUNTIES AND CITY HEALTH DEPARTMENTS, 1999**  
**(By Place of Residence)**

COUNTY	TOTAL	AGE OF DECEDENT (In Years)											
		UNDER 1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85 AND OVER	UNKNOWN
CALIFORNIA	227,965	2,787	595	793	3,018	4,296	9,109	15,907	22,454	41,620	66,388	60,926	72
ALAMEDA	9,863	109	17	30	118	193	420	771	1,075	1,775	2,734	2,621	-
BERKELEY <sup>1</sup>	645	3	1	-	8	10	18	58	61	92	173	221	-
ALPINE	7	-	-	-	-	-	-	-	1	3	2	1	-
AMADOR	359	-	1	3	2	6	10	20	26	66	110	115	-
BUTTE	2,124	7	6	5	23	23	69	116	192	385	665	633	-
CALAVERAS	418	1	-	-	5	6	20	23	45	106	117	95	-
COLUSA	148	2	-	-	1	2	8	11	13	34	44	33	-
CONTRA COSTA	6,569	66	13	24	90	120	206	461	643	1,167	2,029	1,749	1
DEL NORTE	224	1	-	2	2	1	12	25	26	42	67	46	-
EL DORADO	1,149	8	-	-	19	13	41	84	132	232	341	279	-
FRESNO	5,460	85	22	25	113	125	226	390	543	953	1,518	1,458	2
GLENN	241	1	3	1	4	1	6	10	18	42	83	72	-
HUMBOLDT	1,159	6	1	3	15	20	47	90	121	186	355	315	-
IMPERIAL	856	12	1	5	13	20	42	80	88	190	217	170	18
INYO	198	-	-	-	2	-	7	9	20	37	69	53	1
KERN	4,656	78	24	18	82	90	216	346	541	936	1,317	1,006	2
KINGS	700	16	5	3	9	15	34	63	78	138	196	143	-
LAKE	611	2	-	2	3	7	26	42	60	140	193	136	-
LASSEN	199	1	1	-	3	1	6	14	20	35	67	51	-
LOS ANGELES	59,614	841	175	235	937	1,321	2,645	4,446	6,100	10,876	16,597	15,437	4
LONG BEACH <sup>1</sup>	3,276	52	4	11	47	72	158	306	325	557	894	850	-
PASADENA <sup>1</sup>	1,164	17	2	3	10	14	48	69	106	197	321	377	-
MADERA	868	10	5	3	12	19	38	49	92	172	241	227	-
MARIN	1,794	7	2	2	7	14	54	127	135	308	556	581	1
MARIPOSA	183	2	2	-	1	4	6	5	22	28	67	46	-
MENDOCINO	769	4	2	3	8	16	35	54	89	137	222	199	-
MERCED	1,383	24	3	13	25	26	65	110	153	269	372	323	-
MODOC	101	1	-	-	-	1	2	4	9	24	33	27	-
	32	1	-	1	-	2	3	3	4	8	7	3	-
MONO													
MONTEREY	2,374	32	5	7	46	42	71	164	209	438	722	638	-
NAPA	1,218	2	4	2	8	10	32	68	79	183	394	436	-
NEVADA	869	3	1	1	9	11	26	45	70	155	284	264	-
ORANGE	16,644	204	52	51	194	312	552	999	1,571	2,885	4,911	4,913	-
PLACER	1,778	18	2	4	12	22	45	109	146	352	558	510	-
PLUMAS	220	-	2	1	2	2	4	12	25	57	62	53	-
RIVERSIDE	12,019	160	44	35	134	222	457	736	1,121	2,338	3,739	3,027	6
SACRAMENTO	9,004	110	31	33	111	177	376	687	918	1,742	2,547	2,270	2
SAN BENITO	269	2	2	2	2	9	7	18	21	51	84	71	-
SAN BERNARDINO	10,909	215	34	53	193	209	493	845	1,285	2,123	3,047	2,406	6
SAN DIEGO	19,168	225	34	49	229	303	742	1,208	1,647	3,413	5,934	5,362	22
SAN FRANCISCO	6,645	31	5	9	47	145	340	537	613	1,072	1,800	2,046	-
SAN JOAQUIN	4,348	41	12	18	66	94	170	329	464	804	1,224	1,126	-
SAN LUIS OBISPO	2,024	7	-	6	24	25	64	122	150	355	674	595	2
SAN MATEO	4,926	36	5	14	28	73	149	297	427	834	1,563	1,500	-
SANTA BARBARA	2,951	26	7	8	23	48	83	150	204	502	892	1,008	-
SANTA CLARA	9,033	127	22	30	91	161	349	591	890	1,653	2,652	2,465	2
SANTA CRUZ	1,632	17	-	5	16	26	58	122	116	257	456	559	-
SHASTA	1,686	11	4	7	12	27	65	99	189	330	529	413	-
SIERRA	39	-	-	-	-	-	1	1	3	6	12	16	-
SISKIYOU	465	1	-	-	3	7	19	31	40	83	147	134	-
SOLANO	2,358	31	6	9	32	43	100	193	301	471	707	465	-
SONOMA	3,735	32	5	11	35	48	108	239	298	621	1,138	1,199	1
STANISLAUS	3,354	50	8	13	48	68	142	259	361	636	946	822	1
SUTTER	644	4	2	3	17	9	19	29	71	134	191	165	-
TEHAMA	618	6	4	2	4	5	21	43	51	130	207	145	-
TRINITY	137	3	-	-	2	3	3	12	20	27	44	23	-
TULARE	2,545	34	8	15	56	62	103	182	274	473	686	652	-
TUOLUMNE	528	2	1	1	4	2	18	29	52	108	158	153	-
VENTURA	4,556	57	10	18	55	62	172	276	406	818	1,398	1,284	-
YOLO	1,033	8	1	6	14	12	48	77	107	168	307	284	1
YUBA	551	7	1	2	7	11	28	45	79	112	156	103	-

- Represents zero events.

<sup>1</sup> Berkeley, Long Beach and Pasadena are city health departments.

Note: City numbers are included in their respective county totals.

Source: State of California, Department of Health Services, Death Records.

**TABLE 15**  
**DEATHS AND DEATH RATES**  
**BY RACE/ETHNICITY <sup>1</sup>**  
**CALIFORNIA, 1995-1999**  
**(By Place of Residence)**

RACE/ETHNICITY OF DECEDENT	NUMBER OF DEATHS					PERCENT CHANGE 1998 TO 1999
	1995	1996	1997	1998	1999	
TOTAL	222,626	222,308	223,438	225,450	227,965	1.1
AMERICAN INDIAN <sup>2</sup>	749	740	800	798	772	-3.3
ASIAN/PACIFIC ISLANDER	12,037	12,475	13,144	13,591	14,246	4.8
BLACK	18,011	17,925	17,480	17,607	17,842	1.3
HISPANIC	25,901	26,128	26,470	26,979	27,907	3.4
WHITE <sup>3</sup>	165,928	165,040	165,544	166,475	167,198	0.4

RACE/ETHNICITY OF DECEDENT	DEATH RATES <sup>4</sup>					PERCENT CHANGE 1998 TO 1999
	1995	1996	1997	1998	1999	
TOTAL	6.9	6.9	6.8	6.7	6.7	-
AMERICAN INDIAN <sup>2</sup>	3.9 <sup>a</sup>	3.8 <sup>a</sup>	4.1 <sup>a</sup>	4.0 <sup>a</sup>	3.8 <sup>a</sup>	-5.0
ASIAN/PACIFIC ISLANDER	3.6 <sup>a</sup>	3.6 <sup>a</sup>	3.7 <sup>a</sup>	3.6 <sup>a</sup>	3.7 <sup>a</sup>	2.8
BLACK	8.0	7.9	7.6	7.5	7.7	2.7
HISPANIC	2.8 <sup>a</sup>	2.8 <sup>a</sup>	2.7 <sup>a</sup>	2.7 <sup>a</sup>	2.7 <sup>a</sup>	-
WHITE <sup>3</sup>	9.7	9.6	9.6	9.6	9.6	-

<sup>1</sup> Asian/Pacific Islander, Black, Native American and White exclude Hispanic ethnicity. Hispanic includes any race category.

<sup>2</sup> Includes American Indian, Eskimo and Aleut.

<sup>3</sup> Includes White, Other and Unknown.

<sup>4</sup> Rates are per 1,000 population.

<sup>a</sup> Reliability of death rates for Asian/Pacific Islanders, American Indians and Hispanics is questionable due to incorrect reporting of race/ethnicity among these groups.

- Rates unchanged from prior year.

Note: Population data are available for only these five race/ethnic groups.

Rates in this report may differ from rates in previously published Advance Reports since rates were revised to reflect the most current population released by the Department of Finance.

Source: State of California, Department of Finance; 1995-1996 Population: 1970-1996 Population Estimates with Age, Sex and Race/Ethnic Detail, January 1998. 1997 Population: Population Estimates with Age, Sex and Race/Ethnic Detail, June 1999. 1998 Population: Population Estimates with Age, Sex and Race/Ethnic Detail, May 2000. 1999 Population: 1997-2040 Population Projections with Age, Sex and Race/Ethnic Detail, December 1998.

State of California, Department of Health Services, Death Records.

**TABLE 16**  
**DEATHS BY RACE/ETHNICITY <sup>1</sup>**  
**CALIFORNIA COUNTIES AND CITY HEALTH DEPARTMENTS, 1999**  
**(By Place of Residence)**

COUNTY	TOTAL	RACE/ETHNICITY OF DECEDENT							
		AMERICAN INDIAN	ASIAN	BLACK	HISPANIC	PACIFIC ISLANDER	WHITE	OTHER	UNKNOWN
CALIFORNIA	227,965	772	13,667	17,842	27,907	579	167,086	8	104
ALAMEDA	9,863	31	970	2,052	725	56	6,026	-	3
BERKELEY <sup>2</sup>	645	-	41	227	22	-	355	-	-
ALPINE	7	2	-	-	1	-	4	-	-
AMADOR	359	2	4	3	6	-	344	-	-
BUTTE	2,124	12	16	18	54	2	2,022	-	-
CALAVERAS	418	4	2	3	13	1	395	-	-
COLUSA	148	1	2	-	15	-	130	-	-
CONTRA COSTA	6,569	11	333	628	404	16	5,174	-	3
DEL NORTE	224	15	2	1	2	-	204	-	-
EL DORADO	1,149	6	11	-	23	2	1,107	-	-
FRESNO	5,460	18	254	338	1,073	4	3,772	-	1
GLENN	241	4	4	3	14	-	216	-	-
HUMBOLDT	1,159	41	7	6	17	-	1,088	-	-
IMPERIAL	856	3	17	24	408	-	404	-	-
INYO	198	8	2	-	5	-	183	-	-
KERN	4,656	24	95	296	616	2	3,621	-	2
KINGS	700	3	19	43	137	-	498	-	-
LAKE	611	11	2	18	22	-	558	-	-
LASSEN	199	8	-	3	3	1	184	-	-
LOS ANGELES	59,614	105	4,534	8,484	11,189	156	35,120	3	23
LONG BEACH <sup>2</sup>	3,276	10	236	416	302	28	2,281	-	3
PASADENA <sup>2</sup>	1,164	2	48	246	111	1	755	-	1
MADERA	868	7	10	37	149	-	665	-	-
MARIN	1,794	4	47	42	35	2	1,663	-	1
MARIPOSA	183	3	-	-	5	-	175	-	-
MENDOCINO	769	26	4	1	21	-	716	-	1
MERCED	1,383	2	56	84	245	1	993	1	1
MODOC	101	3	-	-	2	-	96	-	-
MONO	32	-	-	1	2	-	29	-	-
MONTEREY	2,374	9	155	74	368	10	1,758	-	-
NAPA	1,218	1	9	4	52	2	1,150	-	-
NEVADA	869	8	2	1	13	-	845	-	-
ORANGE	16,644	19	1,105	180	1,571	42	13,718	-	9
PLACER	1,778	6	29	15	81	1	1,646	-	-
PLUMAS	220	3	-	1	2	-	214	-	-
RIVERSIDE	12,019	53	165	650	1,366	13	9,767	-	5
SACRAMENTO	9,004	31	556	805	555	17	7,037	-	3
SAN BENITO	269	-	6	-	70	-	193	-	-
SAN BERNARDINO	10,909	34	245	833	1,717	18	8,059	-	3
SAN DIEGO	19,168	67	783	862	1,912	79	15,443	1	21
SAN FRANCISCO	6,645	8	1,495	864	486	30	3,756	-	6
SAN JOAQUIN	4,348	22	321	294	509	9	3,191	1	1
SAN LUIS OBISPO	2,024	6	20	10	95	2	1,887	-	4
SAN MATEO	4,926	6	503	243	334	45	3,792	1	2
SANTA BARBARA	2,951	9	88	43	315	1	2,495	-	-
SANTA CLARA	9,033	15	1,176	224	1,077	28	6,504	-	9
SANTA CRUZ	1,632	6	36	13	135	1	1,440	-	1
SHASTA	1,686	25	11	9	24	-	1,616	-	1
SIERRA	39	2	-	-	1	-	36	-	-
SISKIYOU	465	7	1	11	9	-	437	-	-
SOLANO	2,358	5	193	362	153	18	1,626	1	-
SONOMA	3,735	15	40	34	160	5	3,480	-	1
STANISLAUS	3,354	7	61	57	322	1	2,906	-	-
SUTTER	644	1	45	6	43	-	549	-	-
TEHAMA	618	1	4	3	20	-	588	-	2
TRINITY	137	1	1	-	3	1	131	-	-
TULARE	2,545	18	49	38	538	1	1,901	-	-
TUOLUMNE	528	5	1	2	12	2	506	-	-
VENTURA	4,556	14	127	77	639	7	3,691	-	1
YOLO	1,033	7	30	23	114	1	858	-	-
YUBA	551	7	19	19	25	2	479	-	-

- Represents zero events.

<sup>1</sup> Asian, Black, Native American, Pacific Islander, White, Other and Unknown races exclude Hispanic ethnicity. Hispanic includes any race category.

<sup>2</sup> Berkeley, Long Beach and Pasadena are city health departments.

Note: City numbers are included in their respective county totals.

Source: State of California, Department of Health Services, Death Records.

**TABLE 17**  
**DEATHS BY SEX, RACE/ETHNICITY <sup>1</sup> AND AGE**  
**CALIFORNIA, 1999**  
**(By Place of Residence)**

SEX AND RACE/ETHNICITY	ALL AGES	AGE IN YEARS											UNKNOWN
		UNDER 1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85 AND OVER	
TOTAL	227,965	2,787	595	793	3,018	4,296	9,109	15,907	22,454	41,620	66,388	60,926	72
AMERICAN INDIAN	772	13	3	3	13	33	71	81	115	165	173	102	-
ASIAN	13,667	195	50	77	225	273	551	1,050	1,539	2,819	3,891	2,995	2
BLACK	17,842	439	74	107	390	545	1,281	2,070	2,631	3,484	4,029	2,787	5
HISPANIC	27,907	1,297	283	313	1,284	1,542	2,121	2,719	3,224	5,357	5,545	4,201	21
PACIFIC ISLANDER	579	17	4	7	24	33	39	63	114	129	110	39	-
WHITE	167,086	820	181	284	1,082	1,867	5,042	9,906	14,814	29,649	52,621	50,791	29
OTHER	8	1	-	-	-	1	-	1	1	3	-	1	-
UNKNOWN	104	5	-	2	-	2	4	17	16	14	19	10	15
MALE	113,624	1,530	337	452	2,268	3,054	5,941	9,922	13,171	22,980	32,887	21,019	63
AMERICAN INDIAN	402	6	-	2	10	22	40	52	67	91	87	25	-
ASIAN	7,433	107	32	35	155	177	331	577	915	1,546	2,089	1,467	2
BLACK	9,123	227	40	57	304	378	766	1,255	1,529	1,792	1,871	900	4
HISPANIC	15,615	720	158	179	1,021	1,175	1,491	1,779	1,891	2,902	2,767	1,511	21
PACIFIC ISLANDER	339	12	2	5	19	24	22	39	72	73	54	17	-
WHITE	80,640	455	105	173	759	1,277	3,288	6,207	8,687	16,564	26,009	17,092	24
OTHER	5	1	-	-	-	-	-	1	-	2	-	1	-
UNKNOWN	67	2	-	1	-	1	3	12	10	10	10	6	12
FEMALE	114,341	1,257	258	341	750	1,242	3,168	5,985	9,283	18,640	33,501	39,907	9
AMERICAN INDIAN	370	7	3	1	3	11	31	29	48	74	86	77	-
ASIAN	6,234	88	18	42	70	96	220	473	624	1,273	1,802	1,528	-
BLACK	8,719	212	34	50	86	167	515	815	1,102	1,692	2,158	1,887	1
HISPANIC	12,292	577	125	134	263	367	630	940	1,333	2,455	2,778	2,690	-
PACIFIC ISLANDER	240	5	2	2	5	9	17	24	42	56	56	22	-
WHITE	86,446	365	76	111	323	590	1,754	3,699	6,127	13,085	26,612	33,699	5
OTHER	3	-	-	-	-	1	-	-	1	1	-	-	-
UNKNOWN	37	3	-	1	-	1	1	5	6	4	9	4	3

- Represents zero events.

<sup>1</sup> American Indian, Asian, Black, Pacific Islander, White, Other and Unknown races exclude Hispanic ethnicity. Hispanic includes any race category.

Source: State of California, Department of Health Services, Death Records.

**APPENDIX A**  
**POPULATION PROJECTIONS BY AGE, RACE/ETHNICITY AND SEX**  
**CALIFORNIA, 1999**

RACE/ETHNICITY AND SEX	TOTAL	AGE (In Years)										
		UNDER 1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85 AND OVER
TOTAL	34,072,478 <sup>a</sup>	553,480	2,218,731	5,438,254	4,490,994	5,088,372	5,703,159	4,284,494	2,647,776	1,945,679	1,272,523	429,016
MALE	17,099,812	283,033	1,134,840	2,785,041	2,331,075	2,693,838	2,911,607	2,127,558	1,289,251	889,827	519,523	134,219
FEMALE	16,972,666	270,447	1,083,891	2,653,213	2,159,919	2,394,534	2,791,552	2,156,936	1,358,525	1,055,852	753,000	294,797
AMERICAN INDIAN <sup>1</sup>	202,821	2,708	10,870	27,941	29,649	30,382	34,599	29,140	18,557	10,787	5,866	2,322
MALE	99,384	1,387	5,464	14,271	15,330	15,595	16,657	13,647	8,870	4,983	2,384	796
FEMALE	103,437	1,321	5,406	13,670	14,319	14,787	17,942	15,493	9,687	5,804	3,482	1,526
ASIAN/PACIFIC ISLANDER	3,856,288	63,024	249,860	609,625	554,416	605,246	650,641	499,762	281,747	198,623	110,471	32,873
MALE	1,898,886	32,249	128,310	313,269	283,986	306,241	315,058	236,631	133,904	86,803	47,953	14,482
FEMALE	1,957,402	30,775	121,550	296,356	270,430	299,005	335,583	263,131	147,843	111,820	62,518	18,391
BLACK	2,320,916	37,436	150,150	412,399	352,398	361,723	387,780	274,298	164,532	103,767	58,756	17,677
MALE	1,146,811	19,147	76,493	208,881	186,295	189,557	188,667	129,075	76,514	44,942	22,082	5,158
FEMALE	1,174,105	18,289	73,657	203,518	166,103	172,166	199,113	145,223	88,018	58,825	36,674	12,519
HISPANIC	10,352,763	263,940	1,043,348	2,187,045	1,555,795	1,812,547	1,581,171	912,180	481,158	309,686	152,091	53,802
MALE	5,363,508	134,897	532,534	1,117,326	803,837	1,014,469	842,312	462,923	233,374	140,820	62,846	18,170
FEMALE	4,989,255	129,043	510,814	1,069,719	751,958	798,078	738,859	449,257	247,784	168,866	89,245	35,632
WHITE <sup>2</sup>	17,339,690	186,372	764,503	2,201,244	1,998,736	2,278,474	3,048,968	2,569,114	1,701,782	1,322,816	945,339	322,342
MALE	8,591,223	95,353	392,039	1,131,294	1,041,627	1,167,976	1,548,913	1,285,282	836,589	612,279	384,258	95,613
FEMALE	8,748,467	91,019	372,464	1,069,950	957,109	1,110,498	1,500,055	1,283,832	865,193	710,537	561,081	226,729

<sup>1</sup> Includes American Indian, Eskimo and Aleut.

<sup>2</sup> Includes White, Other and Unknown.

<sup>a</sup> Total does not match total on Tables 1 and 2 due to independent rounding by race, age and sex.

Note: American Indian, Asian/Pacific Islander, Black and White exclude Hispanic ethnicity. Hispanic includes any race category.

Source: State of California, Department of Finance; 1999 Population: Population Projections by Age, Race/Ethnicity and Sex, December 1998.



## APPENDIX B

### TECHNICAL NOTES

#### LIMITATIONS OF DATA

Limitations of the data must be recognized by users to avoid invalid interpretations. For vital statistics data, these are related to the difficulties in reporting and classifying information and to some under-registration of events. It is especially necessary to exercise caution when evaluating vital statistics trend data, because medical concepts, legal codes, definitions concerning vital statistics events, estimates of the population, race coding, and methods of assigning causes of death change over time.

#### Variability of Rates

Vital statistics rates are sensitive to variations in the size of both the numerator (the number of vital events that occurred) and the denominator (the estimated population at risk). For example in small counties, a variation of only a few cases in the numerator can cause a relatively large shift in the rate while, in a large county, it may result in no change at all. Likewise, a minor revision in the estimate of the population in a small county may cause a relatively major change in a vital event rate in that county.

#### Sampling Error and Vital Statistics

The number of births and deaths reported for an area in California represents complete counts; as such, they are not subject to sampling error, although they are subject to errors in the registration process. However, when the figures are used for analytic purposes, such as comparison of rates over a time period or for different areas, the number of events that actually occurred may be considered as one of a larger series of possible results that could have arisen under the same circumstances.<sup>11</sup> The probable range of values may be estimated from the actual figures

according to certain statistical assumptions. The problem of random variation of rates is well presented in the Technical Appendix to The Vital Statistics of the United States, 1978, Volume I, Natality<sup>12</sup> and is described as follows:

"In general, distributions of vital events may be assumed to follow the binomial distribution. Estimates of standard error and tests of significance under this assumption are described in most standard statistics texts. When the number of events is large, the standard error, expressed as a percent of the number or rate, is usually small.

When the number is small (perhaps less than 100) and the probability of such an event is small, considerable caution must be observed in interpreting the conditions described by the figures. Such events of rare nature may be assumed to follow a Poisson probability distribution."

#### Computing Percents

Percents used in this report were computed using only events for which the characteristic is reported. The "Unknown" category is subtracted out before the percent is computed.

#### Race/Ethnicity

The following race/ethnic categories and their definitions were used in this report:

American Indian – includes American Indian, Eskimo, and Aleut.

Asian – includes Chinese, Japanese, Korean, Vietnamese, Cambodian, Thai, Laotian, Asian Indian, Filipino, Asian Unspecified, and Asian Specified.

Black – includes Black.

Hispanic – includes Mexican/Mexican American/Chicano, Puerto Rican, Cuban, Central/South American, other Spanish/Hispanic (born outside U.S.), other Spanish/Hispanic (born in the U.S.).

Pacific Islander – includes Hawaiian, Guamanian, Samoan, and other Pacific Islander.

White – includes White.

Other – includes Other Specified.

Unknown – includes Refused to State and Unknown.

For purposes of presenting race/ethnic groups that are mutually exclusive, all persons who indicated they were of Spanish origin were included in the “Hispanic” group regardless of their race. All remaining non-Hispanic persons were included in their respective race group, i.e. American Indian, Asian, Black, Pacific Islander, White, and Other.

## Population

The Department of Finance (DOF) prepares the population data used as denominators for calculating rates in this report. In January 1998 DOF released revised population estimates for the years 1970 through 1996. In 1998, DOF also released population projections for the years 1997 through 2040. In June 1999, population estimates were released for 1997 and in May 2000, the estimates were released for 1998. Rates in this report were calculated using the population estimates for the years 1980 through 1998. Since estimates were not available for 1999, projections were used. Refer to the footnotes on each table for the source of population estimates and projections.

In addition, the population series used to calculate the crude rates in **Table 2A** differs from the population used to calculate the crude rates in **Table 2**. Caution should be exercised when comparing the crude rates among the three city health departments with rates among the 58 counties.

## Cause of Death Coding

The classification of diseases has been revised periodically. Beginning with the 1999 death data, the cause of death coding system has changed from the Ninth Revision of the International Classification of Diseases (ICD-9) to the Tenth Revision (ICD-10). This involved changing from a numeric system to an alphanumeric system almost doubling the number of codes, title changes as well as other changes. This has resulted in a “break in the series” of comparability of cause-of-death statistics.

For more information, see the National Center for Health Statistics (NCHS) web page at:  
[www.cdc.gov/nchs/about/major/dvs/icd10des.htm](http://www.cdc.gov/nchs/about/major/dvs/icd10des.htm)

## APPENDIX C

### DEFINITIONS

The following is a Glossary of technical terms used in this report:

Place of occurrence: The place where the event occurred (regardless of place of residence).

Place of residence: The place where a person lives or maintains legal residency. For live births and fetal deaths, the mother's residence is used.

#### Births

Live Birth: "Live birth is the complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of the pregnancy, which, after such separation, breathes or shows any other evidence of life, such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles, whether or not the umbilical cord has been cut or placenta is attached; each product of such a birth is considered live born." This definition was promulgated by the World Health Organization in 1950 and is set forth in the California Administrative Code, Title 17, Chapter 1, Article 3.

Low Birthweight: A live birth or fetal death weighing less than 2,500 grams (5 pounds, 8 ounces).

#### Deaths

Fetal death: "Fetal death is death prior to the complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of pregnancy; the death is indicated by the fact that after such separation the fetus does not breathe or show any other evidence of life, such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles." This definition was promulgated by the World Health Organization in 1950 and is set forth in the California Administrative code, Title 17, Chapter 1, Article 3. If fetus is 20 weeks or more gestational age, the death must be registered with the local registrar.

Infant death: A death occurring during the first year of life.

## APPENDIX D

### RATES AND RATIO

#### Birth Rates

$$\text{Age-specific birth rate} = \frac{\text{number of live births to women in specific age group}}{\text{estimated female population in that age group}} \times 1,000$$

$$\text{General fertility rate} = \frac{\text{number of live births}}{\text{estimated female population 15-44 years old}} \times 1,000$$

$$\text{Live birth rate (crude birth rate)} = \frac{\text{number of live births}}{\text{estimated total population}} \times 1,000$$

#### Death Rates and Ratio

$$\text{Age-specific death rate} = \frac{\text{number of deaths in specific age group}}{\text{estimated population in that age group}} \times 100,000$$

$$\text{Death rate (crude death rate)} = \frac{\text{number of deaths}}{\text{estimated total population}} \times 1,000$$

$$\text{Death rate from a specific cause} = \frac{\text{number of deaths from a specific cause}}{\text{estimated total population}} \times 100,000$$

$$\text{Fetal death ratio} = \frac{\text{number of reportable fetal deaths}}{\text{total number of live births}} \times 1,000$$

$$\text{Infant mortality rate} = \frac{\text{number of deaths under 1 year of age}}{\text{total number of live births}} \times 1,000$$

## APPENDIX E

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